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OUR SEEDS GROW FRIENDS

SPRING - 1932

THE J. CHAS. MCCULLOUGH SEED CO.

228-230-232 EAST FOURTH STREET - Near Sycumore
CINCINNATI, OHIO

TELEPHONE PArkway 2600 -- ALL DEPARTMENTS

JANUARY 2, 1932

"OUR SEEDS GROW FRIENDS"

We want to thank all our old friends for their wonderful loyalty and the many kind words spoken for our Seeds, Bulbs and Plants. To our new friends we wish to thank you for your part in making the past year one of our most busy and prosperous seasons.

SUGGESTIONS FOR ORDERING

All varieties of Flowers and Vegetable seeds are numbered. Our order sheet is arranged to save you the time and trouble of writing the names of the seeds in full.

If you send your order early the benefit will be mutual. You will have your seed on hand when the planting season arrives and it will enable us to get it out before the "please rush" time arrives.

REMITTANCES can be made by any of the following methods: Post Office Money Order, Express Co. Money Order, Registered Letter, New York or Chicago Exchange or for small amounts postage stamps.

ALL PRICES on VEGETABLE SEEDS are net, but on PACKETS and OZS., WE PREPAY POSTAGE.

Write your Name and Address distinctly and in full; please use the order sheet and envelope inserted in this catalogue.

SEEDS BY MAIL, ETC.

PARCEL POST CHARGES have greatly lowered the cost of sending packages by mail. Most customers are no doubt familiar with charges from Cincinnati and that it depends on the weight of the package and the zone. We have estimated as a general average the following rates and these are to be added to prices of bulk seeds if they be sent by mail. Lb., 7c. Pt., 7c. Qt., 10c. Larger size packages, especially in the 1st, 2nd and 3rd zones will not average quite these prices.

	D	OMESTIC	PARCEL	POST RATES	Firs Pour (over 8 rates 1	nd Additions ozs. Pound	
First Zone within	50 Miles				7c	1c	
Second Zone within	50 to 150	Miles			7c	1c	
Third Zone within	150 to 300	Miles			8c	2c	
Fourth Zone within	300 to 600	Miles			8c	4c	
Fifth Zone within	600 to 1000	Miles			90	6c	
Sixth Zone within						8c	
Seventh Zone within	1400 to 1800	Miles			120	10c	
Eight Zone all over					- 40	12c	

WEIGHTS OF BULK SEEDS in measured quantities are approximately as follows:

Quarts of Peas and Beans approximately 30 ounces.

Corn, Sugar, approximately, quarts 24 ounces, pints 12 ounces.

Corn, Early and Field, quarts 28 ounces, pints 14 ounces.

Onion Sets, quarts 16 and pints 8 ounces.

The above tables will enable customers to remit the proper amount of postage.

When seamless cotton bags are required they must be remitted for at 30c each.

We reserve the right to advance or decline with the market on any item listed in this catalogue.

ABOUT WARRANTING SEEDS

We have often been asked if we "guarantee or warrant our Seeds." We beg to state plainly, we do not, for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is to our interest to send none but the best quality of seeds.

To secure success, however, it is necessary that the customer should do his part well, or our good seeds will be ruined. With the best of management and good seeds there will be an occasional unaccountable failure. The best of gardeners sometimes fail, and try again with seeds from the same lot with good results.

The J. Chas. McCullough Seed Company gives no warranty, express or implied, as to description, cuality, productiveness or any other matter of any seeds, bulbs or plants it sells and will not be responsible for the crop. When mentioned, purity and germination tests are for information only and without warranty. If the purchaser does not accept the goods on these terms, he must notify us at once and we will give instructions for disposition of goods.

THE J. CHAS. McCULLOUGH SEED CO.

62,67

ORDER SHEET

THE J. CHAS. McCULLOUGH SEED CO.

228-230-232 East Fourth Street, Near Sycamore - Cincinnati, Ohio

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THE J. CHAS. McCULLOUGH SEED CO.

TO OUR FRIENDS AND CUSTOMERS



♣ ME BUILDING-SEED CLEANING PLANT - EGGLESTON AVE , THIRD & FOURTH STS.

OFFICE: 720-728 EAST THIRD ST NEAR PENN'A STATION

QUALITY :: SERVICE CONFIDENCE

The use of our seeds has steadily increased because of quality. No one can tell the difference by inspection between good and bad seeds. The planter must have confidence in his seedsman. Our seeds are held at a very high standard to merit this confidence. For 65 years we have been growing and with every move into larger quarters.

Our location in the heart of the seed producing areas, combined with unlimited buying facilities, enables us to give first class quality at a reasonable price. All of our seeds are the result of scientific research. We clean practically every lot of seed we sell, on our own modern seed cleaning machinery. We maintain one of the finest equipped seed testing laboratories to be found anywhere, for your benefit.



Garden Seed and Sales Department—228-230-232 East Fourth Street
Phone PArkway 2600—All Departments

OUR RETAIL GARDEN STORE-

In creating our retail garden store, we desire to make a real shopping center for everything which has to do with gardens and their furnishings. Necessary and desirable articles have been added to give year round practical interest to the store and help you to make your garden your home, in the pleasant months of the year and to make your home your garden throughout the winter.

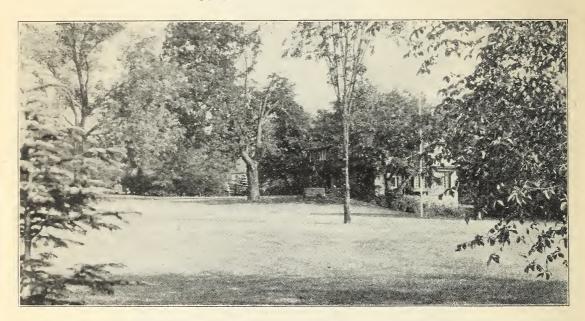
Whether you call at our store for your seeds and garden supplies or order them by phone or mail, we can assure you of the same prompt and courteous attention and the same helpful interest in your garden success.

Buyers of Seeds will find it worth while to devote some of their time to this catalogue. In it you will find reliable information as to varieties of seeds, bulbs, plants, etc. We hope it will be of use to all who are interested in making their vegetable gardens profitable and flower beds and lawns more attractive.

"EMERALD" LAWN SEED

Tested for Purity and Growing Qualities in Our Own Laboratory, FOR YOUR PROTECTION

THERE IS NONE BETTER



"Emerald" Lawn Seed is composed of Kentucky Blue Grass, Red Top, English Rye Grass, White Clover and other fine grasses. (It does not contain any timothy or better known as hay seed.) We combine these grasses because they grow quickly and protect the blue grass, which is slower to germinate, thereby giving not only a permanent lawn but a good sod in six weeks. For 65 years we have made a study of lawns and our experiments have shown us that for quick and permanent results our "Emerald" Lawn Grass Seed has never been excelled. We know that "Emerald" Lawn Seed will give satisfaction wherever a fine velvety turf is wanted, except in dense shade.

QUANTITIES

For New Lawns—1 lb. sows 250 sq. ft. (10 x 25). An acre requires 80 to 100 lbs.

For Old Lawns—It will take about half as much seed as for a new lawn, depending on how thick a stand of grass there is, usually requiring 35 to 50 lbs. per acre for renovating.

MAKING LAWNS

Preparation—The soil should be deeply spaded or plowed, thoroughly pulverized and raked fine and smooth, removing all roots, stones, clods, trash, etc. If not properly graded it should be done now, allowing for water to drain off and not stand in pools. If the lawn is made of clay from recent excavations, it should be covered with 3 or 4 inches of good rich garden soil before the seed is sown.

Fertilizers—Sacco Plant Food, Loma or Pulverized Sheep Manure are thoroughly satisfactory for lawns.

Unless stable manure is well decomposed it contains weed seeds. Work the fertilizer into the soil at time of sowing seed.

Sowing—Seed can be sown in the spring from February to May or in the fall from August to October. To get it evenly distributed half the seed should be sown one way then cross and sow balance at right angles. The seed should be covered by raking or harrowing and then well rolled.

Mowing—Cut the young grass for the first time when it is about 1½ to 2 inches high with either a sharp scythe or a free running machine set high. It is most important to keep grass cut quite short from the very start, otherwise it will grow long and thin, instead of tillering out and covering the ground.

Never allow the grass, whether it be young or old, to grow long and ragged. Two inches may be considered the extreme length to which it should attain at any time of the year. It is not advisable to keep grass too closely cut during hot and dry weather.

Renovating—If the grass is thin it is not necessary in most cases to plow up the entire lawn and reseed, though if it is choked with weeds and there is very little grass left it is decidedly preferable to plow up or spade up the entire lawn and seed over. Unless this is the case, however, raking over roughly with a sharp tooth rake and sowing more seed, will improve the lawn wonderfully. Grass usually dies out from lack of plant food, hence it is a good plan to apply Sacco Plant Food, Loma or Sheep Manure in March, April or May, after the growing season has started.

GRASS SEEDS PRESCRIBED FOR ALL SOILS AND PURPOSES



For Lawns, Shaded Lawns, Golf Courses, Airports and Landing Fields, Bowling Greens, Football, Baseball and Polo Fields.

We supply in this vicinity nearly all of the cemeteries, public parks, golf courses and other places where considerable quantities of grass seed are used and are prepared at all times to furnish the highest quality seeds for all purposes.

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer the following splendid mixtures which can be relied on to be the very highest quality.

"SHADY NOOK" LAWN SEED

For sowing on the north side of buildings, between houses, and for securing a lawn under large shade trees. In many lawns there are places where it seems as though nothing can be grown; some are shaded by large trees and others by buildings. For these locations we recommend our Shady Nook Lawn Seed. It is always advisable for those who are seeding down the shady places to supply new soil, if possible, especially if large trees are producing the shade, as their roots spread so fast as to exhaust the nourishment in the soil. When unable to supply new soil, the ground should be well dug over, and if the tree roots predominate, these should be taken out. In most shady places the soil has a tendency to be sour, and we strongly recommend the use of lawn lime (about 50 lbs. per 1,000 sq. ft.).

Per ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.90; 10 lbs., \$3.50; 20 lbs., \$6.75.

HILL SIDE OR TERRACE LAWN GRASS

For high, dry situations where moisture and poor soil are conditions to be contended with. It is composed

of grasses that will succeed fairly well under these conditions and produces short green turf of fair quality.

Per ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 10 lbs., \$3.00; 20 lbs., \$5.75.

"BENT LAWN" GRASS MIXTURE

This is composed of Agrostis varieties only, a mixture of the wonderful Bent Grasses with a proportion of high-quality Red Top. In rich soil it will produce a turf much finer in texture than a lawn of the ordinary type, and the creeping character of these grasses causes them to mat together and produce the soft, luxuriant feel of an expensive rug. The turf is a deep, rich green color. For this mixture the soil should be exceptionally good and should have additional rotted manure worked into it. Several times during the growing season Wedo, the special fertilizer for lawns only, at the rate of 11/2 pounds per 100 square feet, should be applied to the turf. Sow the seed at the rate of one pound per 250 square feet. This is particularly heavy seed, one bushel weighing 30 pounds.

Per lb., 75c; 5 lbs., \$3.65; 10 lbs., \$7.20; 20 lbs., \$14.00; 50 lbs., \$33.75; 100 lbs., \$65.00.

GOLF COURSE MIXTURES

It is most important that the best seeds be used for this and in proper proportions to produce desired results. New golf courses require somewhat different mixtures from that for old courses because it is imperative that quick sod should be obtained and one which will be lasting and produce good, green, smooth turf. From our long experience with grasses, we are well informed on the requirements for the average golf course whether it be for greens or fairways and will be glad to advise with you. The fact that we are among the largest importers of grass seeds and one of the largest cleaners of domestic sorts, enables us to offer at very reasonable figures.

=GENERAL LIST OF==

ME SELECT VEGETABLE SEEDS

Postage paid on Seeds at pkt., oz., $\frac{1}{4}$ lb., and $\frac{1}{2}$ pt. rates. On larger quantities add 7c per pt., 7c per lb., 10c per qt. to prices.

ASPARAGUS

One ounce of seed sows 50 ft. producing about 500 plants; 10 lbs. sow one acre. One pound produces plants enough to set one acre.

Roots can be set from February to May, or in the fall, in October or November.

100 roots plant a bed 100 feet long and are sufficient for a medium garden. An acre requires 4000 to 7000 roots.

Culture Growing Roots—Asparagus seed is sown in March or April one inch deep, in rows 15 inches apart. Keep clean with hand tools and thin out the plants to four inches apart. When one or two years old, set in permanent beds.

Growing Asparagus—The size of asparagus depends more on high fertilization than on the variety. Well-drained, rich soil, where it will not be in the way when the rest of the garden is plowed is best. Two year old roots give quickest results. Plow or dig out a trench



Burpee's Stringless Green Pod

18 inches wide, six to ten inches deep, making the trenches six to eight feet apart. In the bottom of the furrow use four to six inches of well-rotted manure, then cover with two or three inches of good soil. The roots are set twelve to fifteen inches apart, and should be spread out carefully and afterwards covered with about two inches of soil. Do not cover with too much soil the first year, but the following years they can be hilled up. If white asparagus is wanted the beds should be thrown higher than if wanted for green asparagus.

Do not cut asparagus too late in the spring, as it exhausts the plant. The most practical growers on the day they stop cutting, throw down the beds with a plow, then harrow the ground, leaving the plants to grow. In November the tops are cut off and a mulch of manure put on the top of the rows, which is afterwards worked into the soil, when the beds are thrown up in the spring.

For a small garden asparagus roots can be set in double rows instead of single.

1 Washington—This variety has proven as nearly rust-proof as is possible to produce Asparagus. It is much in demand on account of its heavy yield and fine flavor. The stalks are of rich, dark green color, tinted darker at tips.

Pkt., 10c; oz., 15c; 1/4 lb., 50c.

3 Conover's Colossal—An old favorite, well-known sort, producing very large shoots; tips somewhat blunted and slightly tinged with purple.

Pkt., 10c; oz., 15c; 1/4 lb., 30c.

Asparagus Roots-See Page 71 for Prices.

BEANS DWARF OR BUSH

Sometimes called String Beans, Snap Beans, etc.

Always popular and easily grown. If planted every two or three weeks, commencing after all danger of frost has passed and continuing until about August 15, a supply will be kept up during the whole summer.

One pint plants about 100 feet. An acre requires 1 to 1½ bushels. Half pint planted every 3 weeks is sufficient for a medium garden. They are ready for the table from 40 to 50 days after planting.

Culture—To produce the best results, Beans should have a good soil and deep or thorough tillage before planting and shallow cultivation afterwards to prevent too much disturbing of the roots. Land which was planted in other crops is better than that freshly manured and sheep manure, one or two hundred pounds per acre, will give excellent results. For field culture plant in rows 2½ feet apart, dropping the beans 3 or 4 inches apart in the rows, covering about 2 inches with soil. In small gardens, rows may be 18 inches apart. Up to the time of blooming, cultivate often, but never while the vines are wet, and do not disturb the roots, especially after blooming, as they will blight and the crop will be reduced. Constant picking extends bearing.

Insect Remedies—For Mexican Bean Beetle, dust the under side of leaves with Magnesium Arsenate Dust Mixture. (See Page 74.)

For the Bean Aphis or Lice, spray with "Black Leaf 40".

For Fungus diseases and rust, spray with Bordeaux Mixture.

Postage paid on pkts., and ½ pts. On pints remit 7c; on quarts 10c extra if to be sent by mail.

Grow better vegetables with SACCO PLANT FOOD

BEANS-DWARF OR BUSH-Cont'd

GREEN PODDED VARIETIES

4 Improved Earliest Red Valentine—A well-known very early sort. Pods of medium length about 4½ inches long of medium green color, curved, cylindrical, with crease in the back, very fleshy, crisp and tender. Vines medium to large, erect with dark green leaves. Seed long, purplish pink, splashed with light buff.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

5 Burpee's Stringless Green Pod—A very handsome, long, cylindrical medium maturing green bean. Pods larger than those of the Valentine and straighter. Very fleshy and remain crisp and tender longer. Vines of vigorous growth and productiveness. Seeds oval, light brown in color. A very desirable sort for home gardens and largely grown for market.

Pkt., 10c; ½ pt., 20c; Pt., 30c; qt., 55c; 4 qts., \$2.00.

6 Giant Stringless Green Pod—A highly productive and very handsome sort. Vines vigorous, spreading. Pods large, round, averaging larger and straighter than the Stringless Green Pod, but a few days later. Seed long, slender, buff color.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

7 Dwarf Horticultural—Very popular in most localities, especially for market, as they are valuable both for snap beans and shelling. They become fit for use as shelled beans early, and in this condition the beans are large, easily shelled and equal to Lima Beans in quality. The vines are very productive, compact and upright in growth, with large leaves. The pods are 5 to 5½ in. long, broad, thick, curved and have splashes of bright red on yellowish green. Seeds large, oval, plump, pale buff splashed with red.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

8 Full Measure (Perfection Stringless)—A very desirable round-podded variety with pods 6 to 7 inches long, which are solid, meaty, brittle and stringless. It is a little later than Stringless

Green Pod and is a splendid bean for home or market use. Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

9 Refugee (late or 1,000 to 1). One of the best sorts for late planting and especially desirable for canning and pickling. The vines are large, spreading, very hardy, with small, smooth light green leaves. The beans are borne in great profusion, pods being about 5 to 5½ inches long; cylindrical, slightly curved, medium green, afterwards becoming light yellow, slightly splashed with purple. The seed is long, cylindrical, light drab thickly dotted and splashed with purple.

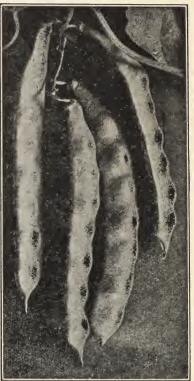
Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

10 Bountiful—An improved long Yellow Six Weeks, in that it is earlier, very much larger and more tender. It is very hardy, extremely early, very prolific, and bears continuously for several weeks. Pods are flat, absolutely stringless, rich green, very large and handsome. The seed is yellow, long, resembling Six Weeks. For very early or very late planting is very desirable for both home garden and market.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

12 Tennessee Green Pod—A dwarf, early, snap bean, which is very popular in Eastern Tennessee and Southern Kentucky. Seed is brown, a little larger than Kentucky Wonder, very hardy and more capable of withstanding inclement weather than most other sorts. The vines are large, somewhat spreading, prolific. The pods are very long (often 6 to 7 inches), flat, irregular in shape, dark vivid green color.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.



Tennessee Green Pod

DWARF BEANS-For Shelling Only

Usually profitable as a farm crop especially in Northern sections.

Culture—Plant in rows about $2\frac{1}{2}$ feet apart. The Navy requires about $\frac{1}{2}$ bu. per acre. Other sorts about a bushel.

15 Dwarf White Navy—The well-known small oval white variety so largely used in all sections.

½ pt., 15c; pt., 20c; qt., 35c; 4 qts., \$1.20.

16 Dwarf White Marrow—Beans oval about double as large as Navy. Vines vigorous and productive.

½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

17 Dwarf White Kidney—Large, white kidney shaped, slightly flattened. Pods about six inches long, large and coarse. Beans excellent quality either green or dry.

½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

18 Dwarf Red Kidney—Similar to above, but dark pink color. Very salable.

½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

Inoculation for Beans—Excellent results will be obtained by treating the seeds of beans with Inoculation Bacteria before planting. It can be easily done. We have it put up in convenient size for small gardens. (See Page 59.)

The Home Vegetable Garden, by E.M. Freeman—A book which shows how to grow fresh, crisp vegetables in your own garden and cut down on the grocer's bills. Full of practical details for laying out the garden, planting, and growing vegetables successfully. 8 illustrations, 214 pages.....\$1.75

PARCEL POST RATES—To calculate Zone Rates. Beans can be taken at the following rates: A pint weighs approximately 15 ozs., a quart approximately 30 ozs.; or packed, a pint weighs about 1 lb., a qt. about 2 lbs.

WAX PODDED VARIETIES

These find ready sale in northern markets and are largely planted by southern growers for shipping. The pods vary from light to golden yellow color.

19 Round Pod Kidney Wax-Long, round, handsome, stringless pods of large size, very solid and full of meat, crisp, brittle and free from rust. Earliest and best Wax Bean.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

20 Wardwell's Kidney Wax—A variety which matures a little later than the Golden Wax, yields large crops of long, nearly straight, broad pods of light golden yellow color. They are extremely showy, consequently are ready sale and most profitable for market gardeners and an excellent variety for growing for home gardens. The seed is large, flat, kidney shape, white with dark markings about the eye.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

21 Pencil Pod Black Wax—One of the most popular varieties for home use and market. The pods are about 4½ inches long, slightly curved, round, very brittle and

tender. They are very fleshy, clear golden yellow color and remain tender a long time. Seed is long, round, medium size, shiny black.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

22 Currie's Rust-proof Wax—A variety which is claimed to be rust-proof. The vines are very vigorous, hardy, productive. Pods, light yellow, similar in shape to Golden Wax, 5½ to 6 inches long. Matures early and is a splendid sort for market gardens and excellent for home use. The seed is long, oval, medium size, purplish black.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

Dwarf Golden Wax-An early maturing variety, very productive. Vines erect, compact, bearing the pods well off the ground. Pods nearly straight, broad, flat, golden yellow, very fleshy and wax like, usually 4½ to 5 inches long. Seed medium size, oval, white blotched with purple. A good sort for home garden, either for table use or pickling.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

BEANS—POLE OR CORNFIELD

These are very profitable and usually command good prices on the markets and are more easily and economically gathered than the Dwarf Beans. Can be planted to run up good, strong poles and some varieties are desirable to use on strong growing corn.

Culture—Pole Beans are more sensitive to cold and wet than Dwarf varieties, hence should not be planted too early. Use poles from 6 to 8 feet long in rows 4 feet apart, placing the poles about 3 feet apart in the row. If the poles are slanted slightly to the north, the vines climb better and the pods are more easily seen. In home gardens three poles are usually placed wigwam style and tied at the top. Around each pole plant 4 to 6 beans from 1 to 2 inches deep. When ready to run, thin to four plants and see that they all climb the same way, as if trained wrong they will not climb. If to be planted in corn, this should be done after the corn is well started and has had two or three workings.

BLACK KENTUCKY WONDER

Introduced by the late J. Chas. McCullough. Plant of large growth, climbs well, very compact, and exceedingly productive. Snap pods very large, 7 to 9 inches long, 8 to 10 seeded, extremely fleshy and very brittle. Suitable for either snap or green shell pur-Undoubtedly the best late green podded sort for snap purposes.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

26 Improved Kentucky Wonder (or Old Homestead)—A well-known variety and one of the most popular of all Pole Beans, especially in the middle sections. The vines are very vigorous, heavy and very prolific, hence not desirable to use for planting in corn. Pods are of irregular shape, bright green, very long, often reaching 9 to 10 inches. They are very tender, crisp and stringless when young, but become irregular and spongy as the beans ripen. The seed is long, oval, slightly flattened and brown or dun colored.

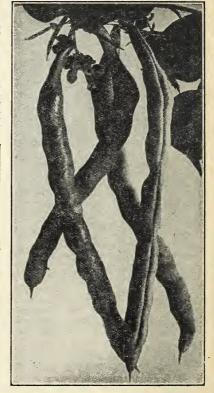
Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

White Seeded Kentucky Wonder. (St. Louis Perfection White)—Similar to the above, excepting that the beans are different shape and solid white. It is early maturing, very desirable for snap beans and an excellent variety for green shelling and unsurpassed in quality as baked beans. Very profitable for market gardeners and highly praised in all sections.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

28 Missouri Wonder—An extremely prolific variety, maturing in the same season or a little later than Improved Kentucky Wonder. A green podded variety of high quality. The pods are nearly as long as those of Improved Kentucky Wonder, but slightly broader and flatter and lighter in color. When in condition for snap beans, the pods are nearly stringless.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.



Improved Kentucky Wonder Pole Bean

29 Red Speckled Cut-Short or Corn Hill—A very popular variety in Central and Southern States, especially for planting among corn. It will give a good crop without the use of poles. The vines are not as heavy as Kentucky Wonder, being medium size, vigorous, twining loosely, with dark colored leaves. Pods are 3 to 3½ inches long, straight, flat, fleshy and of good quality. As they mature the pods become light yellow tinged with red, the beans showing distinctly through the pods. The seed is small, round, light greyish white, splotched with purplish brown.
Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

BEANS-POLE OR CORNFIELD-Cont'd

30 Horticultural Pole or Speckled Cranberry—A very popular variety for general purposes, either as a late green shelled bean or for snaps. The pods are of medium length 4½ to 5 inches long, broad; when young pale green, gradually changing to yellowish green striped or splashed with red. Vines are moderately vigorous, with large light colored leaves. Can be grown on corn or on short poles. As shelled beans they equal in flavor Limas and are excellent to use as dry beans for boiling or baking.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

31 White Creaseback—An extremely early variety, which produces nearly all its pods at the same time. The vines are medium size and vigorous, and in rich soil wonderfully productive, bearing round, fleshy pods in clusters of from 4 to 12, which makes it extremely easy to gather. Pods are about 5 inches long, comparatively straight, attractive, light green, very fleshy, with a crease down the center. Beans are small, oblong, clear white.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

32 Scotia or Striped Creaseback—A hardy and very productive green-podded cornfield bean. The vines are sturdy and of good climbing habit with small-medium deep green leaves. The pods are long, about 6 inches, very cylindrical or completely rounded, distinctly creasebacked, very fleshy and of excellent quality. The color, when in condition for use as snaps, is light, silvery green, becoming tinged with purple as the pods mature. This variety is especially suitable for growing in corn for snaps.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

33 Tennessee Wonder, or Egg Harbor—Large green pods, curved, double barreled, tinged with purple and wrinkled, depressed between each of the eight or nine seeds. Considered one of the largest of all cultivated beans.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

34 Lazy Wife—A somewhat late maturing variety, bearing medium green pods in large clusters. Pods are 5½ to 6½ inches long, broad, thick, fleshy and entirely stringless. When young they have a rich flavor which is retained until they are nearly ripe. An excellent sort for either snap green shelling, or using as dry beans. Seed white, medium size and generally round.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

35 McCaslan—The pods, produced in great abundance, are a rich, dark green color, measuring about 10 inches long, rather flat and slightly curved. Fine for use as a snap sort, being entirely stringless when young. If pods are picked before maturing, vines bear till frost. If pods are allowed to mature, they produce a good sized white bean for winter use.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

36 Ohio Wax Pole—Pods usually 7 inches long, solidly meaty and entirely stringless; commences to bear when scarcely higher than bush variety, and keeps on producing until killed by frost.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

37 Golden Cluster Wax—One of the best Wax podded pole snap beans. The vines are large, strong growing, vigorous and hardy. Pods 6 to 8 inches long, borne in clusters and vary in color from golden yellow to creamy white. The seed is medium size, flattened, oval, dull white.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

LIMA BEANS

DWARF OR BUSH VARIETIES

These are preferred in small gardens, as they can be grown like Dwarf Beans, and without the use of poles. They are not quite so prolific as the Pole Limas, but are earlier and continuous bearers throughout the season. The beans can be gathered much easier than the Pole Limas and they can be grown closer together.

Culture—All Lima Beans are tender and the ground should be dry and the weather warm and settled before planting. They do best in good light soil, and if not rich, an application of sheep manure or other good fertilizer will be well repaid. Plant in drills, 1½ to 2 feet apart, dropping the beans 4 to 5 inches apart and covering about 2 inches deep. Cultivate often until they commence to flower, but only when the leaves are dry.

1 pint of Small Seeded Lima plants 100 to 125 feet and is sufficient for an ordinary garden. 1 quart of other sorts plants about the same space. For succession, make two plantings four weeks apart. Mature in 75 to 90 days from planting.

38 Burpee's Improved Bush Lima—Pods and beans are both larger and thicker than Burpee's Bush Lima, and fully eight days earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans

are of the most luscious flavor.

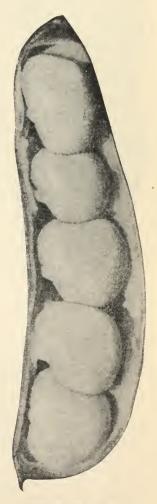
Pkt			10c
$\frac{1}{2}$ pt.			
pt			
qt			
4 qts.			\$ 2.80

39 Fordhook Bush Lima — Avery vigorous and erect growing variety bearing its pods well above the ground in large clusters. Pods are medium green, about 5 inches long and contain 4 to 5 large thick beans of exceptionally quality. We fine quality. consider this one of the best of the large seeded kinds.

Pkt			10c
$\frac{1}{2}$ pt.			
pt			40c
$qt\dots$			75c
4 qts.		\$2	2.80

40 Burpee's Bush Lima—A bush form of the Large White Lima type. Plants are somewhat dwarf but very productive. Pods are medium green, broad, containing 3 to 4 very large flat beans of the best quality. Seed large, flat, white, slightly greenish tinge.

Pkt	t.				. 10	c
1/2						
pt.						
qt.						
4 at	8			S	2 4	n



Fordhook Bush Lima

Dwarf Lima Beans continued on page 8.



Ford's Mammoth Podded

DWARF OR BUSH VARIETIES —Cont'd

41 Henderson's Bush Lima—An exceedingly productive variety dwarf habit. Commences bearing very early and continues to grow and set pods until stopped by frost. vines are without runners, somewhat dwarf, very productive. Beans small, white and most excellent quality either for green shelling or as dry beans.

Pkt	10c
½ pt	20c
pt	30c
qt	55c
fats \$	2.00

POLE LIMA BEANS

Large seeded sorts require 1 quart to 100 poles, 34 bushels to an acre. Small Limas require about one-third the quantity.

Culture—These are to be treated like other Pole Beans excepting they should be planted one or two weeks later. Where soil is very stiff, it is best to plant the beans with the eye downward, as they will come up more rapidly.

42 Ford's Mammoth Podded-The result of 20 years' selection by a market gardener near Philadelphia. It far surpasses in size and productiveness many other sorts and has become very popular through-out all sections. Pods are very large, usually containing 4 to 6 beans. Vines vigorous, setting the beans early and very productive. Beans medium size, excellent quality.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 35c; qt., 60c; 4 qts., \$2.20.

43 King of the Garden—A favorite sort on account of its large size and abundant yield. The beans are of greenish color, very tender and delicious.

Pkt., 10c; ½ pt., 20c; pt., 35c; qt., 60c; 4 qts., \$2.20.

44 Extra Large White Pole Lima—A choice variety of the Large Lima. Pods and beans of large size and a good cropper. Quality unsurpassed.

Pkt., 10c; ½ pt., 20c; pt., 35c; qt., 60c; 4 qts., \$2.20.

45—Small Lima or Sieva—Also called Butter or Carolina. Not as large as the other varieties but a good bearer and about 10 days earlier.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.80.

BEET TABLE VARIETIES

These are popular in all gardens and as a rule a very profitable crop for market gardeners. Beets fresh from the garden are always more tender and delicious than those that are shipped. They can be sown in succession for different seasons and if too many are produced for table use, make excellent food for poultry and stock.

Culture—A deep loamy or sandy soil is best suited to beets. If wanted very early they can be sown in hot beds and transplanted in the open ground when the weather has moderated, but the outer leaves should be trimmed off when transplanting is done. The earliest outdoor sowing is done in March or April, in rows 15 to 18 inches apart, thinning or transplanting the plants to 3 or 4 inches apart in the rows. For winter use, sow in June or July. Roots can be stored in pits or cellars covering with sand to keep from wilting.

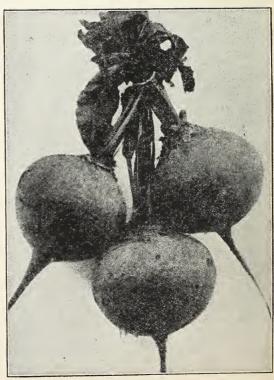
One ounce sows 100 feet of drill. 7 lbs. one acre. Ready for use 60 to 75 days after sowing.

46 Crosby's Improved Egyptian—An improved sort which is very popular with market gardeners on account of its quick growth, extreme earliness and general good qualities. The tops are small, roots flattened but slightly globe shaped and very smooth. Exterior bright red and inside deep vermilion red zoned with a lighter shade. It is one of the very best, sweet and tender varieties, of excellent quality and popular both with the market gardener and for home use. It becomes fit to use earlier than any other variety and is much superior to some of the older sorts.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

47 Detroit Dark Red—Very early and becomingly popular. Produces medium size globe-shaped roots which are very smooth and of dark blood red color. Very desirable for bunching. Comparison of this with other varieties proves that Detroit Dark Red is the most uniform beet in size and most attractive in color. It is splendid for market or home gardens on account of its uniform deep red color and most desirable for canning.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.



Detroit Dark Red

BEET-TABLE VARIETIES-Cont'd

48 Early Eclipse—This has long been a popular variety for home gardens and market growing. The tops are small, roots bright deep red, smooth, round or slightly top-shaped with a very small tap root. It is splendid for bunching; is very sweet, crisp and tender, especially when young.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

49 Norwood Blood Turnip—A superb early maincrop Beet. Both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, smooth, and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. Foliage is small, of a rich bronze color.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.

50 Extra Early Egyptian—An old well-known popular variety which has long been a favorite with market gardeners. It is the earliest sort and largely used for forcing. Has very small tops and produces flat, medium size roots which are very dark red, moderately thick and distinctly flat on the bottom. Flesh is dark, purplish red, firm, crisp and tender.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

52 Edmand's Early Blood Turnip—A dark red, nearly round variety which is slightly flattened. Exterior, dark red; interior, purplish red with a little zoning. Crisp, tender, sweet and one of the best for main crop, being an excellent keeper.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

53 Improved Early Blood Turnip—A selected stock of this old and very popular variety. It is deep red color, zoned with lighter shade; roots round, slightly flattened and excellent for summer and autumn use.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

54 Dewing's Blood Turnip—A medium early sort which is very tender and sweet and a good keeper. Roots are dark purplish red, turnip shape with a medium size tap.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

55 Long Smooth Blood—A splendid late variety producing large, smooth, rather slender roots which grow largely under ground. It has few side roots and is good shape and color, exterior being dark purple, almost black, with delicate red flesh which is tender and sweet. It is an excellent sort for main crop or pickles. Produces very good crops so that it is a profitable grower for stock feeding.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

56 SWISS CHARD—This variety is grown for its tops only which are boiled like spinach. It does not make edible roots but produces white leaves; the stalks should be cooked and served like asparagus. Makes a splendid summer vegetable and is becoming popular. Known also as the Silver or Spinach Beet.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

BEETS FOR STOCK FEEDING

Too little attention is paid to this important crop for winter feed for stock. They yield enormously, sometimes making fifteen tons to the acre; are very nutritious, not only improving the general condition of stock but greatly increase both the quantity and quality of milk in cows. A variety of feed is always beneficial to all animals and Mangel Wurzel and Sugar Beets afford one of the best crops for this purpose as they are superior in feeding qualities to turnips and are a much larger yielding crop. All farmers and especially stock raisers should grow them extensively.

Culture—Sow in the latter part of April, May or June at the rate of 6 lbs. to the acre, in rows 2½ to 3 ft. apart and thin to 8 inches apart. If seed is soaked 24 hours before sowing, it germinates more quickly but it should be put in when the ground is moist. The crop is harvested before frost and packed away in barns or cellars. They can also be put into piles or ridges five or six feet high and covered with straw or litter to keep from freezing too much. When the winter weather comes, throw on a layer of four to six inches of earth. A protection of boards to shed heavy rains is also desirable.

57 Mammoth Prize Red Mangel—Particularly suited to deep soils but succeeds on any medium or heavy soil. The roots are very large, uniform, and are enormously productive. Flesh is white, tinged with red. One of the best for general purposes.

1 oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

58 Golden Tankard Mangel—A variety which produces very large roots, oval shaped, the bottom being larger than the top. It is light grey above ground; deep orange yellow below, flesh yellow zoned with white. A splendid sort for shallow soil and produces enormously on rich ground.

1 oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

59 Lane's Imperial Sugar—A very popular variety for stock and one which will succeed well in this latitude. The roots grow to a large size and it is more

like a Mangel Wurzel in character but the flesh is sweeter and more tender, being finer grained. Especially valuable for poultry.

1 oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

BROCCOLI

60 Italian Green Sprouting. A distinct variety extensively cultivated by Italian gardeners. Plant forms a large, solid head which remains green. When the central head is cut, numerous sprouts develop from the leaf axes, each sprout terminating in small green heads, which are bunched for market.

Pkt., 15c; oz., 50c.

BRUSSELS SPROUTS

A vegetable of the Cabbage family, which is largely used in the fall. It produces stalks about 2 feet high, which are covered with small, miniature heads, resembling small Cabbage. These are cooked and served like Cabbage and are very tender and delicious.

Culture—Same as for late Cabbage, but plants are set closer together.

61 Perfection—A semi-dwarf variety and one of the best. Pkt., 10c; oz., 35c.

CABBAGE

FINEST AMERICAN STOCKS

To raise the best crops of Cabbage, it is of the utmost importance that select seed stock be used. The varieties we list are saved from the very best stocks and will give excellent satisfaction. We particularly call attention to Copenhagen Market and see Late Flat Dutch, as being the leading sorts of the types. All home gardens should plant some Savoy Cabbage, as it is so much more delicious in flavor than the ordinary sorts. 1 oz. for 2,500 plants.

Culture—For earliest plants the seed is sown in hot beds from January to March. To make the best plants, sow early and transplant to cold frames. Then at the end of March or first of April, transplant to the garden. One ounce makes about fitteen hundred good plants. Six ounces makes plants enough for one acre. For

summer use, sow in the open ground in April and for late use, sow in May or June. There is no crop that repays so well, heavy fertilization and constant cultivation. When plants are planted in the field, apply sheep manure either in the drills or around the plant, mixing with the soil.

YELLOWS-RESISTANT CABBAGE SEED

Both varieties listed below are the result of special breeding against Yellows or Wilt Disease, an infection frequently attributed to hot or dry weather. Our stock seed is selected rigidly and continuously for type and resistance. We offer only first generation seed from such stock.

62 Marion Market—Highly resistant to yellows; round head; short stem; will permit close planting. Earliest of all yellows-resistant varieties selected from Copenhagen Market. Pkt., 10c; oz., 75c; ½ 1b., \$2.75.
63 Yellows-Resistant Hollander—This is a strain of Hollander or Danish Ballhead. A heavy yielding,

round head, late type. Pkt., 10c; oz., 50c; ¼ 1b., \$1.75.



Golden Acre Cabbage

FIRST EARLY SORTS

64 Golden Acre—This is a new, early, round-headed Cabbage which closely resembles Copenhagen Market in type. As its name implies, it is a money-maker. It is 8 to 10 days earlier than Copenhagen Market but is smaller and can be planted closer. Because of its earliness and fine quality it commands a higher price than any round-headed Cabbage.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

65 Early Jersey Wakefield—One of the earliest and by far the surest heading of first early Cabbages. Most gardeners depend upon it entirely for their extra early crop. It is exceedingly hardy, resists cold and unfavorable conditions and is the most likely to yield satisfactory results. Plants are compact, with erect conical shaped heads and few outer leaves. Stems short; heads of medium size, very solid and of excellent quality.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

66 Early Winningstadt—One of the best conical or sharp heading sorts which is compact and of excellent quality. Quick maturing. It is the hardiest, not only as regards frost but will suffer less from excessive wet, drought, insects or disease than any other sort of its class.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

68 Copenhagen Market—The earliest round-head or flat Cabbage yet introduced. The heads are exceptionally large and it has a very short stem and few outer leaves—a most excellent sort for home gardens and market gardeners. On account of extreme earliness, it is destined to become one of the leading sorts grown, as a flat cabbage fills barrels or crates faster than sharp head cabbage and will yield the grower more returns. We predict for Copenhagen Market an extensive cultivation. Our stock of this is from one of the best Denmark growers.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

SECOND EARLY VARIETIES

72 All Seasons—One of the largest and a thoroughly satisfactory second early sort. Plants are vigorous, sure heading; leaves large and smooth. This is a first class sort both for early and late planting and is especially adapted for kraut. It is well adapted to stand the hot sun and adverse conditions.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

73 Early Dwarf Flat Dutch—A variety which has long been popular among growers, both for home use and markets. The heads are borne on short stems and are very large, solid and nearly flat on the top. Practically nearly every plant will form a good, solid head, which will mature earlier than Late Flat Dutch.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

74 Henderson's Early Summer—An excellent second early Cabbage, which is a vigorous, strong grower, producing moderately large heads. It has rather spreading outer leaves, which are somewhat frilled and the stem rather short. The heads are round, solid and a trifle earlier than other summer sorts, and in addition will stand longer without bursting than most others.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

75 Allhead Early—As early as most of the early summer cabbages; the deep flat heads are extremely solid and uniform in color, shape and size. Splendid for kraut making.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

CABBAGE—LATE VARIETIES

77 Premium Late Flat Dutch-A very superior strain of this well-known popular Cabbage which is exceptionally reliable for main crop planting. It is short stemmed; has rather large early leaves, very showy heads and produces uniformly large, flat, deep solid heads of splendid quality. It is an excellent keeper and can be relied upon as thoroughly satisfactory.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

78 Large Late Drumhead—One of the oldest and most popular of late sorts, producing large rounded heads. It has been grown for many years and our stock is an improved stock. The heads are somewhat more globe shaped than the Late Flat Dutch. Leaves large, loose, spreading. An excellent keeper.

Pkt., 10c; oz., 20c; 1/4 lb., 75c.

79 Danish Ballhead or Hollander—A variety though introduced but a comparatively short time has become one of the standard sorts in the Cabbage growing districts in the north. It produces very large, solid heads, which are globular in shape, has few but rather large, thick, bluish green leaves. Heads are borne on short stems, medium size, round, very solid and stands shipment better than any other late sorts. It is one of the very best keepers and is much desired for kraut. Our stock is Denmark grown and very select.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

81 American Perfection Drumhead Savoy-Too little attention is paid to the Savoy Cabbage in this locality, as for home gardens it is unquestionably the most desirable of all Cabbages. It is used almost entirely for late planting and attains its greatest perfection in flavor after frost, when it becomes as tender and even more delicious than Cauliflower. The heads are of medium size, borne on short stems and not as large as the ordinary late Cabbage, hence will stand closer planting. Our stock of this is American grown and will produce uniformly large heads for this variety. We strongly recommend it to be more extensively grown both for home use and market.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

82 Red—A variety used mainly for pickles and sauerkraut. It is highly esteemed.

Pkt., 10c; oz., 30c; ¼ 1b., \$1.00.

CABBAGE PLANTS

We can supply nearby customers with Early and Late Cabbage Plants which we grow on our farms. We do not send these plants by mail.

CARROT

FINEST FRENCH STOCKS

An easily grown, useful and most healthful vegetable which should come into more extensive use. In Europe they are extremely popular, and as they add flavor to soups and meats, besides being healthful, delicious and to an extent ornamental, should be more largely used. In addition to their table uses, they make excellent pickles, and any that are left over are nutritious food for all kinds of stock and poultry.

Culture-Carrots do best in rich, light loamy soil, and where the soil is shallow or stiff, select the short growing varieties, rather than the longest rooted sorts. For early crop sow in March; for main crop in April or May, in rows 18 inches apart, cultivating and weeding as soon as the plants are up. Continue in cultivation until maturity. Cover the seed half an inch deep and see that the soil is pressed firmly, thin 4 to 6 inches apart.



Chantenav

One ounce sows 200 feet of row. 3 or 4 lbs. per acre.

88 Oxheart (or Guerande)—A short, thick growing variety, especially adapted to stiff or hard soils. Roots four and a half to five inches long, very thick, ending abruptly in a small, tapering root. Flesh bright orange, finest quality, an excellent sort for market, home use and fine for stock feeding and poultry.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

90 Chantenay—A medium early variety, orange red color, crisp and tender. Roots smooth, thick, five and a half to six inches long, uniformly stump rooted but tapering slightly. One of the best in quality and productiveness for either home garden or market and especially desirable for heavy soils, because it can be harvested easily.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

91 Half Long Danvers-A deep orange, tender variety, producing roots of medium length, six to eight inches long, tapering uniformly to a blunt point. They are very productive and well adapted to nearly all classes of soil for main crop planting.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

92 Nantes or Half Long Scarlet-A handsome variety, producing roots of medium size, slender with small necks. Roots usually five to six inches in length, sometimes longer. A good sort for moderately early planting.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

93 Improved Long Orange—A well-known popular sort, well adapted for loamy or deep soil, on which are produced very large crops. Roots deep orange color, usually about twelve inches long, three inches in diameter at the crown, tapering to a point. An excellent sort for table use, markets and particularly adapted for stock feeding. Roots tender and of good quality.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

CAULIFLOWER

One of the most delicious vegetables in cultivation but on account of its difficulty in growing, not so general in the average garden as it should be. Any one, however, can be reasonably sure of success if good seed is obtained and cultural instructions given below followed.

Culture—For early spring or summer crop sow the seed in January or February in hot beds. When the plants have four leaves, transplant to cold frames for development. Toward the end of March or early part of April, set in open field and cultivate the same as cabbage. If the soil gets very dry, water well when possible. When the plants are set in the garden, the ground should be rich; if not so, a little sheep manure or well rotted manure should be worked into the soil before the plants are set out. The plants should be thoroughly worked during the growing season and when the heads commence to form, the leaves should be tied over the flowers to protect from the sun and make them white. For fall use, sow at the same time as for late cabbage and treat in the same manner. Cauliflower will not head in very hot weather—hence, for fall use, too early sowing is not desirable.

1/4 ounce produces about 500 plants. Three ounces will make enough plants to set one acre.

Cauliflower Plants Supplied in Season. Early Snowball and Early Dwarf Erfurt. We do not send these plants by mail.

96 Early Snowball—Unquestionably the earliest maturing strain of short leaf type of Cauliflower. It is well adapted for forcing or winter use for early crop and is one of the most popular of all sorts both for the market gardener and home use. The plants are compact, leaves small, and can be adapted for close planting. Produces large size flowers pure white, of most excellent quality. Our strain of this is selected Denmark grown and can be relied on as one of the most satisfactory of all.

Pkt., 20c; oz., \$1.75.

CELERY

This is one of the most profitable crops for market gardeners where the acreage is small. It is popularly supposed to be a difficult crop to grow but this is not true if ordinary preparation and care are taken. It requires rich soil, heavy manuring, plenty of water and careful attention.

Culture—For earliest crop the seed should be sown in hot beds from the middle of February to the end of March. For main crop sow in open ground March or April, according to the weather, in rows 15 inches apart. The seed is sometimes slow to germinate, and in dry and hot weather water well. Careful weeding by hand will have to be done until the young plants get started. Seed sown in beds should be transplanted. When the plants are set in the open field, trim the tops off and put in rows about 5 feet apart, setting plants 6 to 8 inches apart. Cultivate constantly during the growing season, and as the crop matures it must be earthed up or blanched. Sometimes this is done by placing two boards upright, close to the plants and filling in dirt both on the sides and in between the plants. The stalks are handled by hand but the soil must not be allowed to get in the center. Sometimes, Celery is set in beds about 4 feet wide, 6 inches between plants, and 12 inches between rows, the earth being thrown out on each side of the bed. Then as it grows it is earthed in for blanching. A new method of growing Celery, which is sometimes used, is to plant a plot completely over, setting plants about 6 inches apart. This enormous growth shades the young stalks so that they turn white but it requires exceedingly rich, heavily manured soil, deep and well drained and plenty of water for irrigation. An ounce sown in about 100 feet produces 5 to 8,000 plants. 4 to 6 ounces produce plants enough to set one acre, which matures in 120 to 150 days according to the kind and location.

100 Improved White Plume—An extra early and very handsome sort which is very popular with market gardeners, especially for very early crop. Leaves are light, bright green at the base, shading nearly white at the tip. As plants mature, the inner stem and leaves turn white and consequently require less earthing and blanching before they are in condition to use or market. While it is very attractive and the earliest sort, its quality is not nearly so good as that of most other varieties, being somewhat stringy and not so tender.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

101 Golden Self Blanching—This is not only a very early variety but one of the best for home use or market. It is not quite so early as White Plume but so much finer quality that it is generally preferred as a main crop sort. Plants are medium size, compact and stocky with yellowish green foliage. As they mature, the inner stem turns a beautiful yellow golden color and blanching is easily accomplished. Being of handsome color, very crisp, tender, free from stringiness and of fine flavor, it is the leading sort grown.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.25.

102 Giant Pascal—A green leafed variety of the Golden Self Blanching type, from which it was developed, and one of the best for fall and early winter use. It blanches a beautiful yellowish white, is very solid and crisp and has a fine nutty flavor. Stalks of medium height, thick, solid, flattening towards the base and one of the best for main or late planting.

Pkt., 10c; oz., 25c; 1/4 lb., 85c.

105 Celeriac or Turnip Rooted Celery—Very popular with the French and Germans and is used for its roots only, which have a fine sweet, nutty celery taste. It is used either boiled or raw, has a delightful flavor and can be used in soups, salads or as a table vegetable. Culture about the same as for Celery.

Pkt., 10c; oz., 25c; 1/4 lb., 85c.

Celery Plants supplied in season. (June, July, August.) Varieties, White Plume, Golden Heart and Golden Self Blanching. We do not send these plants by mail.

COLLARDS

One of the most popular Southern vegetables; largely used in place of cabbage. It is hardier and easier to grow than cabbage, can be grown on poorer soil and withstand insect attacks better. Although often sown during the spring and summer, the principal sowings are made in June, July and August, transplanted 2 feet apart in the row and given frequent cultivation. A

most excellent vegetable for the late fall, winter and early spring. The flavor is improved by frost. Cultivate like late cabbage.

109 True Georgia or Southern—Stands cold weather and adverse conditions splendidly and grows on land too poor to make a crop of cabbage.

Pkt., 10c; oz., 15c; 1/4 lb., 30c.

CORN-GARDEN VARIETIES

Packets and half pints postage paid.

For pints remit 7c, for quarts 10c, if to be sent by mail.

One pint plants about 200 hills, six to eight quarts to an acre. For succession planting about every two weeks from April to end of July; ready for the table 60 to 90 days from planting.

Culture—Extra Early Dent Corn can be planted at the end of March or early in April. Sugar corns are more tender and should not be planted until warm weather is settled and ground becomes warm. Cultivate frequently and keep the ground free of weeds

SEED CORN TREATMENT REDUCES DISEASE DAMAGE

Seed disinfection with Improved Semesan, Jr., will help greatly to prevent damages by diseases to the roots, stalks and ears of Field and Sweet Corn. It protects seed against rotting, permits earlier planting, increases germination, controls blight and increases crop yields. See page 76.

EARLY DENT GARDEN CORNS

These are not Sugar Corns but valuable for their hardiness as they can be planted earlier and will mature quicker than Sugar Corns—hence, usually very profitable for market gardeners.

110 Extra Early Adams—The earliest variety and extensively used for first early table corn in the South. Stalks about 4 ft. high with few leaves and without suckers. Ears short, very full, 12 to 14 rows, kernels white and smooth; an extremely hardy sort; can be planted close together and usually popular.

Pkt., 10c; ½ pt., 15c; pt., 20c; qt., 35c; 4 qts., \$1.15

111 Early Adams—A little larger and later sort of about the same characteristics as Extra Early Adams. Stalks about 6 ft. high, ears 12 to 14 rows and a good variety for second early or very late planting.

Pkt., 10c; ½ pt., 15c; pt., 20c; qt., 35c; 4 qts., \$1.15.

YELLOW SWEET CORN

112 Golden Bantam—Selected Northern Grown—The most popular variety of yellow Sweet Corn ever offered; also one of the earliest and hardiest. It can be planted safely earlier than other varieties. The plants rarely grow over 3½ feet in height, and usually bear at least two ears, 5 or 6 inches long, on each stalk. Many people assert that Golden Bantam is the sweetest of all Corns; its plump, rich, creamyellow kernels are tender, milky and delicious. All our Golden Bantam seed is Northern grown, making it especially valuable for early planting.

Pkt., 10c; $\frac{1}{2}$ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

113 Wonder Bantam—There has been an ever increasing demand for an early Sweet Corn having all of the good qualities of Golden Bantam Sweet Corn, together with a larger ear and having about the same maturing season. To accomplish this, Wonder Bantam has been introduced by the crossing of Early Wonder and Golden Bantam Sweet Corn. The stalks grow from 5 to 6 feet in height and have ears 8 to 10 inches in length filled with 8 rows of rich golden colored kernels. It is a variety that will appeal to the critical market and home gardener.

Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

114 Golden Sunshine—The earliest of the Golden Bantam type, maturing a week to ten days earlier than that variety. More dwarf in habit than Bantam, with ears 6½ inches long, containing 12 rows of broad, yellow, sweet grains. Especially desirable for its extreme earliness.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.80.

115 Golden Giant—It excels all the other early varieties of corn in size, productiveness and quality; and all the late varieties in quality and early maturity while equaling them in size.

Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

116 Bantam Evergreen—A cross between Golden Bantam and Stowell's Evergreen and is a most excellent sort of fine quality. The ears average 8 inches long and are 12-rowed, the grain is rather broad and deep and of a rich golden-yellow color.

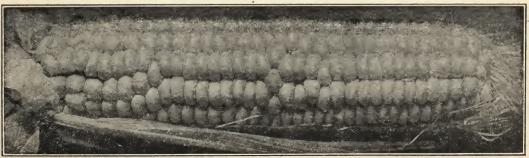
Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

EARLY SWEET CORN

Sweet or Sugar Corns are so much superior for table use to the ordinary dent or field varieties, that they should be planted exclusively for this purpose except for very earliest crops. They are very prolific, producing in many cases 3 to 4 good ears to the stalk. As a market crop, corn is very profitable, as an acre produces from 800 to a 1000 dozen ears which sell readily at good prices.

117 Whipple's Early—Of the narrow-grained Evergreen type, but ready for use much earlier. Ears 8 to 9 inches long, 16 to 18 rows of pearly white grains. The chief distinction of this variety is that it is by far the earliest of the narrow-grained Evergreen types and has a larger sugar content.

Pkt., 10c; $\frac{1}{2}$ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.



Golden Bantam

EARLY SWEET CORN—Cont'd

118 Early Evergreen—An early strain of Evergreen of great value. This variety resembles the Stowell's Evergreen, but is ready for use much earlier, and remains in good condition equally as long. The ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep, sweet grains.

Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts.,

119 Early Sheffield—The stalks are strong and vigorous, bearing one or two fine ears to a stalk. The ears are large and entirely free from smut. The grains are of medium size, 10 to 12 rowed, well filled to each end of the ear; juicy, and of a fine sweet flavor.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.80.

CORN—SWEET OR SUGAR

120 Black Mexican—For home use we consider this one of the best second-early sorts where tenderness and sweetness are the qualities most desired. The stalks grow about 6½ feet high, producing ears usually 8 inches long and 8-rowed. The dry grain is dark bluish The ripe corn on the cob is also bluish black but, if used young, this corn cooks remarkably white. This is an interesting variety

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts.,

\$1.75

Mammoth White Cory-One of the best, extra early corns producing very large ears for so early a variety. Stalks about 4 ft. high, generally bearing 2 large finely shaped ears which become fit for use very early. Grains large, broad, very white, of fine quality and usually 12 rows to the cob. A splendid sort for private gardens and probably the most profitable for early market gardens.

Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

122 Early Mammoth—Resembling the well-known Late Mammoth in general characteristics but 10 days to two weeks earlier and slightly smaller in size.

Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts.,

123 Howling Mob—A variety a little later than Mammoth White Cory. Ears measure seven to nine inches in length, twelve to fourteen rows; white grains. Stalks strong, of vigorous growth, four and a half to five feet in height, have abundant foliage and usually produces 2 good ears to the stalk.

Pkt., 10c; ½ pt., 15c; pt., 25c; qt., 40c; 4 qts., \$1.40.

Kendel's Early Giant-A remarkably large eared second-early sort which is very popular in some sections. Ears are 8 to 9 inches long, 12-row; grains broad, rather shallow but the quality is good.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.80.

SWEET CORN—MAIN CROP

125 Country Gentleman-Probably the most popular of all sorts for home gardens on account of its sweetness, tenderness and delicious flavor. Ears 7 to 8 inches long, round, medium size. Grains zig-zag or staggered, small in size but set close on the cob and very deep.

Pkt., 10c; ½ pt., 15c; pt., 25; qt., 40; 4 qts., \$1.40.

126 Stowell's Evergreen—One of the standard main crop sorts which has long been popular with commercial growers, canners and one of the best for home gardens. It is hardy, thrifty, productive, very tender and sugary and remains in edible state longer than most other sorts. Ears 7 to 8 inches long, having 14 to 20 rows of very deep grain. Stalks 8 to 9 ft. high, bearing 2 or 3 large ears.

Pkt., 10c; ½ pt., 15; pt., 25c; qt., 40c; 4 qts., \$1.40.

127 Zig-Zag Evergreen-A development of the Stowell's Evergreen which has become very popular. The rows instead of being straight are irregular; the grains set very close on the cob. Ears are 8 inches long, large grains, very deep, sugary, tender and of fine flavor. This is becoming a very popular sort and in many sections is superseding the well-known Stowell's Evergreen.

Pkt., 10c; $\frac{1}{2}$ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.80.

128 Late Mammoth—The largest and latest of all Sugar Corns, producing ears which are about 11 inches long, 16 to 18 rowed. Grains are broad, somewhat short but of good flavor, sweet, tender and delicious. One of the best sorts for late crop, especially for market.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.75.

129 Club Zig-Zag Evergreen—A late variety of Zig-Zag Evergreen Corn, the ear generally being twice the size in diameter of any other sort and of a fine, sweet flavor.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.75.

POP CORN

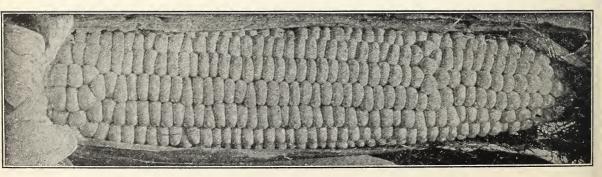
A very profitable crop in many sections and grown in enormous quantities. It is popularly "the boys' crop" and all gardens should have a small quantity.

Rice—A well-known white sort with pointed grains; very highly prized for popping and most satisfactory.

1/4 lb., 10c; 1 lb., 20c.

White Pearl—A smooth-grained sort making fair sized ears; grains pearly white reliable for popping.

1/4 lb., 10c; 1 lb., 20c.



CORN SALAD

An excellent salad for winter and spring. The seed is sown in August or September, in drills one foot apart. Press on the soil to make it firm and it will germinate better. As freezing weather approaches cover with straw or coarse litter. Seed can also be sown very early in the spring if on rich soil.

132 Large Seeded—Round leaved, the best variety. Pkt., 10c; oz., 15c; ¼ lb., 40c.

CUCUMBER

Usually a profitable crop for market, as if not salable for table uses, finds a fair market with pickle factories. All home gardens should grow Cucumbers, as they are useful as a salad or for pickling. Cucumbers fresh from the garden are much superior to those purchased, which are often wilted.

One ounce plants 50 hills; two pounds to one acre. Plant in April or May for early crop; ready for the table 50 to 75 days from planting.

Culture—Rich soil or one containing plenty of well-rotted manure is best; hence hills are usually made about 4 feet apart using manure or sheep manure well mixed with the soil. For very earliest crop the seed may be started in hot beds, in pots, small paper boxes, or pieces of sod, grass side down, so that they can be readily transplanted to open ground without disturbing the roots. For earliest crop outdoors plant 8 to 10 seeds in hills or drills 4 feet apart. On cold nights or threatened frost they can be protected by pieces of paper weighted with earth; after danger of frost and destruction by insects, thin the plants to about 4 to the hill. For late crop plant from the end of May until July. Cultivate occasionally, keeping the grass and weeds out, and when the fruit is ready for use, pick whether wanted or not, as it will extend the life and productiveness of the vines.

134 Longfellow—The Longfellow is a White Spine type, developed so that it would have the slender, darkgreen appearance of a hothouse cucumber but which could still be grown outdoors. Vines are vigorous and productive. Fruits 12 to 14 inches long and 2½ inches in diameter. Can be grown in the garden or greenhouse and stands shipping well.

Pkt., 10c; oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50.

135 Improved Early White Spine—One of the best sorts for table use and probably the most popular sort grown by market gardeners and truckers. The vines are vigorous, producing fruit early and abundantly. Fruits are uniformly straight, about 8 inches long, vivid green color changing to and streaked a whitish green at the tip.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

136 Improved Long Green—One of the most popular sorts for home gardens and in country districts for home markets. Fruits are very long, often 12 inches, slender and uniformly dark green color. It is rather late maturing. The vines are very vigorous and fairly productive. The matured fruits are excellent and tender for table use and both large and small can be used for pickling.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

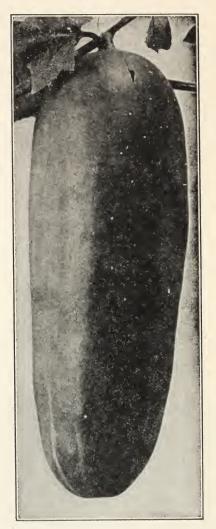
137 Davis Perfect—A development by crossing the Improved Long Green with an English Frame Variety. It is dark, rich green color, slightly tipped with white at the end; has very few seeds and excellent for slicing. Fruits are often 12 inches long, very slim and showy. Particularly fine for home gardens.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; 1 lb., \$1.10.

138 Early Frame—A well-known short, green variety, producing quite abundantly, uniformly straight moderate sized fruit. Valuable for very early planting or for late use for pickling as it is more prolific than the large fruited sorts.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; 1 lb., \$1.10.

140 Early Fortune—The finest type of White Spine yet produced. Early and very productive; fruits grow 9 inches long, slightly tapering, flesh white, firm and



Improved White Spine Cucumber

crisp with very few seeds; color dark green. Quality is excellent, either when sliced for use at the table, or for making pickles.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

141 Jersey Pickling—A variety shorter than Long Green, slender and produces very abundantly. Vines are vigorous and productive. A very popular main crop sort for market and commercial uses.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

143 Nichol's Medium Green—A variety intermediate in length between the White Spine and Long Green, producing straight, medium sized cylindrical fruits of dark green color, which are most excellent for slicing and extremely popular for pickling. Vines, vigorous, productive. A very profitable variety for canners and commercial growers for late crop.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

144 Early Green Cluster—Short and prickly; bearing in clusters; prolific; fine for bottling.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; 1 lb., \$1.10.

145 White Wonder—Fruit, produced in clusters, is symmetrical, short, blocky and rounded at both ends; color ivory-white from time of forming until maturity; moderately productive.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

EGG PLANT

A well-known popular vegetable which produces large purple fruits. It is served mostly fried. Seed germinates slowly and should be started in hot bed.

One ounce produces 1500 plants. Four ounces will produce enough to set one acre. Ready for table in 120 days from sowing.

Culture—Sow in February or March in warm hot beds. When the plants have two rough leaves, transplant to 3 or 4 inches apart or into small pots; after all danger of frost is past, say about the middle or end of May, transplant to the garden, setting plants about three feet apart each way. It is desirable to protect the young plants from very hot sun at first.

148 Black Beauty—Ten days to two weeks earlier than New York Improved Purple. Fruits slightly longer and darker than this variety, being rich dark purple, large and symmetrical. It is very desirable for market as it holds its color a long time. It is entirely free from spines; splendid for early crop or very late planting.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.50.

149 New York Improved Purple (Spineless)—This has long been a general favorite both for market gardeners and home use. It is the largest variety in cultivation and one of the best. The plant is robust, usually producing 4 to 6 large, oval fruits of splendid dark purple color.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.50.

Plants—Ready in May. We do not send these plants by mail.

ENDIVE

One of the best salads for fall and winter use and sometimes used for greens, flavoring soups and stews. It may be grown at any season but is more generally planted for fall.

Culture—For early use, sow about April 15th; for late use, sow in August, in drills 18 inches apart, and when large enough, thin out to about one foot apart. When nearly grown tie the outer leaves together over the center in order to blanch up the heart. By covering fresh plants every few days a succession may be kept up. ½ oz. to 100 ft. row.

150 Green Curled—One of the hardiest and best varieties for general use. It has deep green leaves, beautifully cut and curled and is early blanched; is very crisp, tender and of fine flavor.

Pkt., 10c; oz., 15c; 1/4 lb., 45c.

151 Broaf Leaf Batavian (Escarolle)—A variety having broad, more or less twisted, waved, bright green leaves with thick white mid-ribs. It is much larger in growth than other sorts and has a flavor all its own.

The inner leaves form a very solid, clustering head; are blanched a beautiful deep, creamy white; crisp; tender and of fine flavor. Very highly esteemed by the French and popular wherever used.

Pkt., 10c; oz., 15c; 1/4 lb., 45c.

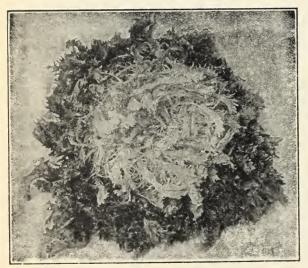
152 Moss Curled—A compact growing variety forming large dense clusters, finely divided, medium green leaves. When properly blanched is rich creamy white and tender. An ornamental variety for salads.

Pkt., 10c; oz., 15c; 1/4 lb., 45c.

GARLIC

A bulbous rooted plant of the Onion family, with a strong penetrating odor; very desirable for flavoring both cooked vegetables, soups, etc., as well as salads. Garlic does not have seed and is planted from small bulbs only. Plant same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the row, covering 2 inches deep. When the leaves turn yellow, take up the bulbs, dry in the shade and store in a dry loft as you would Onions.

Bulbs—1/4 lb., 20c; 1 lb., 50c.



Green Curled Endive

HERBS

Most of these should be sown in April and can be transplanted when large enough. The seed is small and should be sown in drills and firmed down. Keep clean of weeds. Most of them are to be cut when in bloom, wilted in the sun, and dried thoroughly in the shade.

Caraway Seed for Flavoring, 1/4 lb., 10c; 1 lb., 20c.

157 Dill—A popular aromatic Annual Herb which is largely used for seasoning pickles, sauces, soups, etc. Pkt., 10c; oz., 20c. 161 Sage—One of the most extensively used plants for seasoning. It is a hardy perennial growing about 15 to 18 inches high.

Pkt., 10c; oz., 40c.

Blue Poppy for Flavoring, per lb., 20c.

Yellow Mustard for Flavoring, per lb., 25c.

KALE

A popular crop for fall, winter and spring use as greens. In the South it is boiled with bacon. Excellent for garnishing. In addition to its table uses it is a splendid soil improver and very nutritious as a grazing crop for cattle, hogs or sheep.

Culture—In this section it is usually sown broadcast from the middle of August to the middle of October at the rate of 3 or 4 pounds to the aere. Scotch Kale is sown earlier and when very early is usually sown in drills. In the spring seed can be sown in February, March and April. Spring sown Kale requires 5 to 6 pounds to the acre and Smooth Kale should have 6 to 8 pounds to the acre. The ground should be prepared cleanly and harrowed as finely as possible. Seed can be covered with a smoothing harrow or roller but not covered too deep.



Dwarf Green Curled Kale

164 Dwarf Green Curled—An old standard winter variety in this section. Leaves are light green in color, tinged with purple, beautifully curled, and when properly cooked make a very palatable dish of greens. In this locality, will stand the winter.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

165 Dwarf Curled Siberian—A vigorous growing sort of spreading habit, its green foliage having a distinctive bluish tinge or bloom. Very hardy and a favorite in many sections both for greens and extensively grown for forage.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

166 Dwarf Green Curled Scotch—A finely curled, spreading, low growing variety, which is very popular around many trucking centers, especially in the East. The leaves are attractive, bright green color and beautifully curled which make it excellent for garnishing. It must be sown earlier than other sorts; usually from July until end of August or can be sown in March. Can be sown either in drills or broadcast.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 90c.

167 Tall Curled Scotch—Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 90c.

KOHL-RABI

A vegetable intermediate between a Cabbage and a Turnip which combines the flavor of both. It forms a turnip-shaped bulb above ground which is boiled and served like Turnips. If used when young is tender and a very desirable vegetable.

Culture—For early use sow in hot beds and transplant. Out of doors sow in open ground the first part of April in rows 18 inches apart; thin out or transplant to 6 inches apart in the row. Cultivate same as Cabbage. It can also be sown the latter part of June or in July for fall use. One ounce will sow 300 feet of drill.

168 Early Purple Vienna—Very early with small tops, bulbs good size. A variety of good quality.

Pkt., 10c; oz., 20c; 1/4 lb., 60c.

169 Early White Vienna—An excellent sort for general use, has white tender flesh of pleasant flavor.

Pkt., 10c., oz., 20c; 1/4 lb., 60c.

LETTUCE

A popular crop in all small gardens and one of the most profitable for market gardeners, both for winter forcing and for summer growing providing the weather is seasonable or irrigation can be done.

Culture—For Winter Forcing—Sow from September to February, the curled varieties about every four weeks apart or the heading sorts about six weeks apart. As one crop is cut, another should be ready for planting.

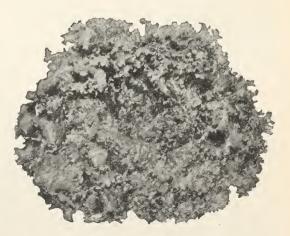
Out of Doors—For early spring crop, plants can be started in hot beds and transplanted to rows one foot apart, setting the plants 6 to 8 inches apart in the row. Later sow seed in rows 12 to 15 inches apart and thin out or transplant if desired leaving the heads to stand 6 to 8 inches apart in the row. A succession of varieties should be kept up from early summer until late fall.

One ounce sows 300 feet of drill. Three pounds one acre. One ounce produces about 4,000 plants; an acre requires about 50,000 plants set 8 x 15 inches.

CURLED OR LOOSE-HEAD VARIETIES

173 Black Seeded Simpson—The best sort for nearby markets and for home gardens on account of its superior quality. It forms a large, loose head, very bright green, nearly white and is exceedingly tender. Is largely used for forcing under glass and a superior sort for earlier crop.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.



Black Seeded Simpson Lettuce

LETTUCE-Cont'd

CURLED OR LOOSE-HEAD VARIETIES-Cont'd

172 Grand Rapids—The most popular variety for greenhouse forcing, especially for shipping. It is of quick growth, hardy and not liable to rot; remains in good condition several days after being fit to cut. Plants are upright and uniform; leaves finely crimpled at the edges. It is the heaviest loose-headed sort, will stand shipping better and is a very attractive variety.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

174 Early Curled Simpson (White Seeded)—Makes a large, loose curled head similar to Black Seeded Simpson. Particularly adapted for sowing thickly and cutting when the plants are young. Leaves light green, slightly frilled, much blistered, crisp, sweet and tender.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

175 Early Curled Silesian—An old and very popular variety which is probably the earliest and quickest sort grown. Plants loose, not quite so large as Black Seeded Simpson. Popular for outside.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

176 Early Prize Head—A large clustering, non-heading sort, most excellent for home gardens as it is very early. It is too tender for shipping. Leaves are finely curled and crumpled, bright green tinged with brownish red; very crisp and tender.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

CABBAGE OR HEADING VARIETIES

178 Iceberg—A beautiful lettuce, with large curly leaves of a bright, light green, with a very slight reddish tint at the edges. Handsome heads, unusually solid because of the natural tendency of the large, strong leaves to turn in which also causes thorough blanching. Crisp, tender and fine flavor.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

179 Top Notch—A distinctly improved variety of Big Boston and one of the very best for forcing or out-of-door culture. Under favorable conditions the heads will measure 10 to 12 inches across; are bright, lively green color without the brownish marking of Big Boston. The heart and inner leaves are pure white. It is deliciously flavored, very tender, of splendid quality and highly recommended for extensive market growing or home use as it will be found thoroughly reliable in heading and the most profitable of this type.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.



Improved Hanson

180 Big Boston—This has long been a favorite sort with market gardeners and truck growers and in some sections is planted almost exclusively. It forms a large compact head, forces well in frames and thoroughly satisfactory for outdoor crops in the spring or very late head crop in the fall. Leaves are broad, comparatively smooth, color bright light green. The heads slightly tinged with reddish brown.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

181 California Cream Butter—A splendid sort for second early crop which has glossy, deep green leaves, the outer ones slightly splashed with brown, it forms a large, very solid head, rich light yellow in color, very tender and buttery. A reliable sort for market or home gardens.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

182 Improved Hanson—A splendid summer heading sort and probably the most popular of its class in this section. The plant is compact, forming a large cabbage-like head which remains in good condition a long time. The outer leaves are yellowish-green, somewhat crumpled with a large distinctive mid-rib. The inner leaves white, sweet and tender. This variety is a little coarse in quality, but on account of its large size and general reliable summer heading qualities, is profitable and desirable for summer use.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

183 New York Lettuce—Blanches beautifully. Crisp, tender and free from bitterness.

It produces immense heads, often 15 and 16 inches across, and weighing enormously. The interior is beautifully blanched, creamy-white, crisp, tender and delicious, being absolutely free from any trace of bitterness. It is a very large, robust growing variety, rooting deeply, resisting hot, dry weather, very slow to run to seed and a sure header under most trying conditions.

Pkt., 10c; oz., 20c; 1/4 lb., 60c.

MUSKMELON OR CANTALOUPE

One ounce plants 50 hills; two pounds to one acre. Plant in May for early crop; in June for late crop.

Culture—Seed is planted in hills 6 ft. apart, putting 10 to 12 seeds to the hill and covering one inch deep. If land is not rich, use well-rotted manure or a little sheep manure mixed with the seil. When danger of insects is over, thin out to 4 plants to the hill.

Packets, ounces and ¼ lb., mailed free; for pound, 7c extra if to be sent by mail.

190 Honey Dew—Its name has been well chosen; as it is about as sweet as Honey. The average size is about 6 inches in diameter, and they weigh five to six pounds. The skin is smooth with little netting and of creamy yellow when ripe. The flesh is a beautiful green next to the outside rind shading to light green at the center. It is very thick, fine grained and can be eaten almost to the rind and the seed cavity is quite small.

Pkt., 10c; oz., 20c; 1/4 lb., 50c.

191 Rocky Ford—The flesh is green, thick, with small cavity, very sweet and has that spicy flavor that makes a cantaloupe so delicious. The melons are oval shaped, slightly ribbed, well covered with fine netting, and are uniform in size and shape.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

192 Green Nutmeg (or Jenny Lind)—Fruits small, somewhat flattened, deeply ribbed and netted. Flesh green, exceedingly sweet. An extra early variety and on account of its size, a desirable table melon. Vines vigorous and productive.

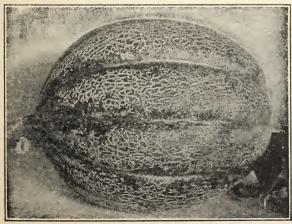
Pkt., 10c; oz., 15c; 1/4 lb., 40c.

193 Ohio Sugar—The flesh is an attractive green of fine texture, sugary, juicy, tender and free from stringiness. It is round, inclined to oval, distinctly ribbed and thickly netted. Because of its firm flesh and solidity, it is a splendid shipper.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

194 Acme or Baltimore Market—Similar in shape to Rocky Ford but larger. Flesh is thick, green, well flavored and sweet. Very productive and a sure cropper. One of the most desirable of the large or medium size melons.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.



Hearts of Gold or Improved Hoodoo

195 Extra Early Hackensack—Two weeks earlier than the Large Hackensack and produces medium sized fruit, somewhat flattened, evenly deep ribs with coarse netting. The flesh is green, slightly tinged with yellow, juicy and sweet.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

196 Large Hackensack (or Turk's Cap)—An old and well-known sort which produces very large greenfleshed fruits which are nearly round and flattened. Flesh green, thick, juicy and sweet.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

197 Bender's Surprise—Exquisitely fine flavor, large size and earliness combine to make this new melon a great favorite. The melons are of oval shape; flesh deep orange, very thick, deliciously sweet and of high flavor. Grows fairly large, weighing up to 10 lbs. each. The melons are very firm, keep for a week after being picked.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

198 Hearts of Gold or Improved Hoodoo—A new orange-fleshed variety, ideal as a shipping melon and of the very finest quality. Fruits uniformly of medium size. Rind thin yet very firm. Flesh very thickfirm, of fine texture and delicious flavor.

Pkt., 10c; oz., 15c; 1/4 lb., 50c.

199 Pollock's No. 10-25—Best described as a salmon tinted Rocky Ford, being identical in every way except color of flesh, which is a light salmon in color at the center, shading into a light green midway to the rind. It is rapidly superseding the green fleshed variety in the large melon growing districts of the South and West.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

200 Emerald Gem—An early yellow fleshed melon of small to medium size which is one of the very best for home gardens. Vines vigorous and productive. Fruits globe shaped, flattened, somewhat irregularly ribbed and very slightly netted. Outer skin dark green when young, becoming slightly tinged with yellow. Flesh deep salmon yellow, thick, melting and very highly flavored.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

201 Tip Top—A popular sort with market gardeners, producing very large sized melons, ribbed but almost smooth skin. Flesh salmon, very deep, a little coarse but exceedingly sweet and luscious. Especially desirable for very rich soil and one of the most profitable for market.

Pkt., 10c.; oz., 15c; 1/4 lb., 40c.

202 Osage or Miller's Cream—A medium salmon fleshed melon of excellent quality. Fruits are oval, dark green, slightly ribbed, tinged with grey. Flesh salmon color, thick and highly flavored. A splendid sort for late or main crop, especially for market.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

203 Banana—A long, smooth-skinned variety, growing something in the shape of long squash. Fruit about 12 inches long, salmon flesh, which is very sweet, luscious and tender. Much esteemed in some localities.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

WATERMELON

Watermelons do best on old, rich soil, which is not too freshly manured, hence when making the hills, well rotted manure should be used, and it is better to prepare them some time ahead before planting the seed. If manure cannot be obtained, use good commercial fertilizer or sheep manure mixed with the soil.

One ounce plants 20 hills. 4 lbs. per acre. Plant early in May or for later use, in June.

Culture—Treat as for Muskmelon, but give more room, 10 or 12 feet apart each way.

204 Ribault—Long and thick in shape, measuring 24 to 30 inches long. The color is dark green, indistinctly striped, mingled with lighter green. The rind is medium thick and stands shipping well. The meat is red and sweet, free from hard centers. Very prolific and of splendid quality.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; 1 lb., 85c.

205 Stone Mountain or Dixie Bell—A melon of finest quality and claimed to be the sweetest of all the large melons. It is almost round and has a dark green, medium thick rind. Flesh, rich scarlet. It is not unusual to grow Stone Mountains weighing 70 to 80 pounds. For home use and nearby markets it is unexcelled.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.00.

206 Excel—Will produce more large, marketable melons under the same conditions than any of the other sorts of the long variety and its carrying and keeping qualities are unsurpassed. Fruits oblong in shape, dark green color with tracings of light green. Flesh deep red, crisp and tender. Weight, 35 to 60 pounds.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

207 Tom Watson—A long, dark green melon, which has become exceedingly popular on account of its large size and general fine qualities. Vines are vigorous and productive. Flesh rich bright red, very juicy and sweet. Most suitable for nearby markets, family gardens, and a favorite with truckers, as it stands shipping well and retains its color and good quality a long time.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

208 Kleckley's Sweet—One of the best flavored melons in cultivation and one of the best for home use or nearby markets. It is long, very dark green with thin rind. Flesh deep red, of fine delicious flavor.

Pkt., 10c; oz., 15c; 1/4 lb., 35c; 1 lb., 75c.

209 Florida Favorite—A well-known popular sort which has long been a favorite for home use and market. Ripens early, has dark green rind, striped with light green. Flesh light crimson, exceedingly sugary, fine and tender. Very delicious and highly recommended either for home market or family use.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

210 Fordhook Early—The fruit is of good size, rather short and blocky in form, with large diameter. Skin dark green, occasionally with faint stripes of lighter green. Rind quite thin, but skin tough, making an excellent shipping variety. Flesh bright red, crisp, sweet and of splendid quality.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

211 Kolb's Gem—One of the older sorts producing oval melons and all large size. The rind is exceedingly hard and firm, being irregularly marked with mottled stripes of dark and light green. Flesh is bright red, solid, a little coarse, but sweet. One of the best round sorts for shipping as it will handle better than almost any other sort.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

212 Sweetheart—A very popular shipping sort particularly in the South. Fruits are very large, oval, very heavy with thin rind which is of light green color, slightly veined with darker shade. Flesh bright red, firm, very sweet and the fruits remain in condition a long time after ripening. A splendid sort for market or main crop being of fine appearance and sells readily.

Pkt., 10c; oz., 15c; ¼ 1b., 30c; 1 1b., 75c.

213 Peerless or Ice Cream—A splendid early sort for home or market gardens. Vines moderately vigorous, hardy and very productive. Fruits are oblong, medium size, bright green finely veined with darker shade. Flesh bright scarlet, crisp and very sweet.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

214 Gray Monarch or Long Light Icing—Fruits uniformly long and large, oblong in shape. Color light green slightly veined with darker shade; flesh deep rich red of splendid quality.

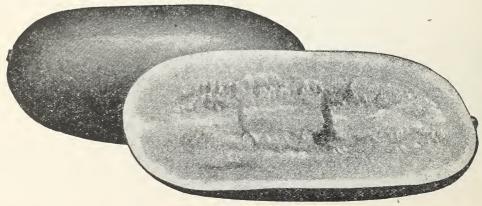
Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

215 Gypsy (or Georgia Rattlesnake)—One of the most popular of the older sorts especially in the South. Fruits are large, very long, of light green color distinctly striped and blotched with darker shade. In the South it is very highly esteemed and especially desirable for growing and shipping. The rind is remarkably thin though very tough; hence, it stands shipping well. Flesh most tender, sweet and luscious. Fruits are uniformly good quality.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

216 Halbert's Honey—A long dark green melon of moderate size but such splendid quality that it is especially desirable for market or home use. The rind is very thin. Flesh bright crimson and so crisp and tender that ripe melons will split ahead of the knife in cutting. We especially recommend this for general planting as it is very productive, of excellent quality and a splendid seller.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.



Halbert's Honey

WATERMELON—Cont'd

217 Dark Icing-A round or oval shape which has been a favorite for home use and nearby markets. Melons are medium sized, oval, dark green in color with bright red flesh which is extremely tender and sugary. A splendid early sort and highly desirable for home or early market.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

218 Irish Gray—The size is uniform and large. Color of rind yellowish-gray and almost as tough as that of the Citron. Ripens earlier than Watson and will keep in good condition for a long time after picking. prolific and a good shipper. A fine market sort.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., 75c.

MUSTARD

Quite popular in the Southern States for boiling as greens. The Southern Giant Curled is becoming popular for shipping. White Seeded is used for pickles and medicinal purposes.

Culture—Sow broadcast or in drills 12 inches apart in March or April or in the fall in September or October. Cut when 3 inches high. One ounce sows about 80 feet of drill. An acre requires 4 to 6 pounds.

Southern Giant Curled, or Chinese—A large growing sort with succulent, pungent leaves of sweet flavor. The best variety for use as greens.

Pkt., 10c; oz., 15c; 1/4 lb., 25c.

White-Used for greens and the seed largely used for pickles and flavoring.

Pkt., 10c; oz., 15c; 1/4 lb., 25c.

MUSHROOM SPAWN

Mushrooms can be grown in cellars, sheds, under benches in green houses or hot beds. They are also planted outside in pastures or sod. It is a very profitable crop both for forcing or a field crop. Our cultural instructions are somewhat limited but we can furnish a booklet of more extended information on "Success with Mushrooms". Price, 25c.

One brick will spawn about ten feet square.

Culture—In preparing a mushroom bed, take three parts fresh stable manure, free from straw, and one part of good pasture soil. Mix thoroughly together and let it stand until the heat has sunk to about 90 degrees. Make the bed from this mixture about four feet wide, eight inches deep and any desired length. As soon as the temperature of the bed is about 70 or 80 degrees, the spawn may be inserted in pieces about the size of a walnut, and six inches apart each way. When the spawn is diffused through the whole bed, which will be in about ten days from planting, cover with two inches of fine loam and press down firmly. Over this place a layer of straw about four inches thick. Do not water unless the surface gets extremely dry, and then only with water at a temperature of



Mushrooms in a Bed

80 degrees. When gathering the crop, twist them off at the roots and do not use a knife. Cover the hole with soil to keep insects away from the root. Mushrooms can be grown in a great variety of situations; under the benches in a green house, a dark room, cellar, stable or elsewhere.

English Mushroom Spawn-Well-known and popular. Put up in bricks weighing about 11/4 lbs. Per brick, 25c; 5 bricks, \$1.00.

OKRA OR **GUMBO**

One of the most popular Southern vegetables and largely used for flavoring soups, stews, gravies and canned tomatoes.

Culture—Sow in drills 2½ feet apart after the weather has become settled and warm. Thin out to 18 inches apart in rows. To keep for winter, slice the pods when young in narrow rings and string or hang in the shade to dry.

One ounce sows about 100 feet. 10 lbs. per acre. Plant in April or May. Matures in 60 to 70 days from planting.

White Velvet-An early maturing and very productive variety growing about 31/2 feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sorts and is very popular in some sections.

Pkt., 10c; oz., 15c; 1/4 lb., 25c.

225 Dwarf Prolific-One of the most popular sorts in the South, growing 3 feet high, producing large pods deeply ribbed, tender, fine flavor.

Pkt., 10c; oz., 15c; 1/4 lb., 25c.

226 Perkins' Mammoth-Plant dwarf; are very attractive. Producing long, slender, deep green pods, which remain tender a long time.

Pkt., 10c; oz., 15c; 1/4 lb., 25c.

ONION SETS

There are three distinct classes of these. Potato or Hill onion sets can be planted in the fall from August to November and produce both green spring onions, large onions and sets. Perennial or Egyptian Top onion sets are planted in the fall and produce green spring onions early in the spring. Bottom Sets or regular green spring onons early in the spring. Softom sets of regular onion sets of commerce are small onions which were previously grown from seed. These, set out early in the spring or in the South in the fall, produce one large onion from each set, towards the end of June or first of July. Pickling onions (which is a larger size bottom set) are used in some localities for fall planting to produce early green spring onions. All onion sets are hardy and can be set in the open ground as early as the weather will permit. They are usually planted in rows 15 inches apart—4 inches apart for small sets and 6 to 8 inches apart for potato sets. Potato onion sets can also be planted in the spring. It takes about 16 bushels of bottom onion sets per acre, and 20 to 25 bushels of potato onion sets, according to the size and distance apart. Cultivate with hoe until maturity.

If to be sent by mail, add 7c per qt. for postage. Prices of onion sets are subject to market changes. Prices on application.

Yellow Danvers—Probably the most largely planted of all onion sets, producing an early crop of fine quality onions.

White or Silver Skin-Pure white of mild flavor and usually preferred for private gardens.

Australian Brown-A very hardy variety of medium size which is extremely early and of good quality.

Yellow Potato or Hill-A mild, yellow variety, producing several large onions and clusters of sets.

Egyptian or Perennial Tree (Called Top Onion Sets)—For spring or summer green onions.

ONION

One of the most nutritious and healthful of vegetables, having excellent medicinal qualities and most useful for flavoring salads, soups, meats, etc. It can be produced easily from either sets or seed and is one of the most satisfactory vegetables in the garden.

Culture—Growing Large Onions from Seed—Seed is sown in rows 15 inches apart as early in the spring as ground can be worked and covered about ½ inch deep. The Planet Junior Seed Sower is the implement for this and it requires 4 to 5 pounds per Sower is the implement for this and it requires 4 to 5 pounds per acre. Cultivate with a wheel hoe as soon as plants are up and handweed. After getting a good start thin onions to about 4 inches apart. Constant weeding and cultivation are required throughout the season. Rich soil, most heavily manured, is required to grow large crops of onions. The mucklands of Ohio, Indiana and Illinois are particularly suited to this crop but fertilization has to be kept up to produce a large and profitable crop. Onions grown from seed mature much later than those grown from sets.

Crowing Sets—To produce compercial Onion Sets known as

Growing Sets.—To produce commercial Onion Sets known as Bottom Sets, the seed is sown in rows 11 to 12 inches apart in fine clean soil at the rate of 40 to 60 lbs. per acre. Cultivate with a wheel hoe and hand-weed. The sets are ready for pulling in July and are cleaned and stored in an airy loft. For pickling onions, one course sows 150 ft : 15 lbs. per sers.

one ounce sows 150 ft.; 15 lbs. per acre

230 Large Red Wethersfield—A splendid red variety, very popular in the East. Bulbs somewhat flattened, thick and very large. Skin deep purplish red, flesh white tinged with purple, moderately fine grained, strong but pleasant flavor. It is medium early and well suited to rich soil. Is a good keeper and productive.

Pkt., 10c; oz., 20c; 1/4 lb., 60c.

Yellow Flat Danvers-An early or main crop variety of medium size, light coppery yellow color. Bulbs flattened but are quite thick with small necks. Ripen down evenly and keep well. This is the standard and most popular sort sown for yellow sets.

Pkt., 10c; oz., 20c; 1/4 lb., 60c.

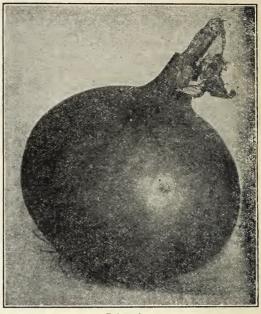
233 Yellow Globe Danvers—One of the most extensively grown yellow onions. Bulbs are of large size, uniformly globe shape with small necks. Ripen evenly. Flesh creamy white, crisp, mild and excellent flavor. Onions have a yellow coppery color, showy and handsome.

Pkt., 10c; oz., 20c; 1/4 lb., 60c.

Ohio Yellow Globe-A very much esteemed and popular sort grown extensively in this State. Particularly suited to rich soils. Onions somewhat more flattened at the base than Yellow Globe Danvers and more blunt at the top. Color rich yellow tinged with orange. Flesh, creamy white, mild and fine flavor. One of the best for main crop planting and shipping as it is an excellent keeping sort.

Pkt., 10c; oz., 20c; 1/4 lb., 60c.

235 Prizetaker—The true Prizetaker is globe shape, has pale yellow skin and white flesh, which is very mild and of delicate flavor. It is strictly "fancy", and will be found on fruit stands during the fall, where it is



Prizetaker

sold as Spanish Onion. No sets are required, as the large onions are grown the first year from seed sown during early spring.

Pkt., 10c; oz., 20c; ¼ lb., 60c. 236 Riverside Sweet Spanish—A very large globeshaped, light yellow onion with small top and an exceptionally fine shipper. It is a Spanish variety resem-

bling Prizetaker, which has quickly become very popular.
Pkt., 10c; oz., 25c; ¼ lb., 75c.
237 Silver Skin or White Portugal—A well-known and favorite variety making medium size onions of mild flavor with beautiful, clear white skin. Largely used for sets and pickling onions. Mature 10 days earlier than White Globe. Bulbs are nearly round when of bunching size but somewhat flattened when mature.

One of the best flattened sorts for general use.

Pkt., 10c; oz., 25c; 1/4 lb., 75c.
White Globe—A fine early or main crop sort for home gardens. Flesh is firm, fine grained, white, mild and more desirable for cooking than the yellow or red sorts. Bulbs are globe shape, full at the shoulder, round at the base, keep well and a good market variety.

Pkt., 10c; oz., 25c; 1/4 lb., 75c.

PARSLEY



Moss Curled Parsley

Easily grown and useful for so many purposes, such as garnishing, seasoning salads and for ornamental purposes. Grown in the garden as edging it is both ornamental and profitable.

Culture—Seed is sown in rows ½ inch deep and one foot apart. Cover firmly but not deep. As it is slow to germinate, usually taking 3 to 4 weeks, soaking in water is desirable. One ounce sows 150 ft. of drill. For winter growing it can be sown or transplanted to cold frames or to hot beds and is usually profitable.

239 Champion Moss Curled—A beautifully curled and crimped variety which is much preferred. It is vigorous, compact in growth and excellent for garnishing—a handsome decorative plant. One of the most popular for market and home gardens.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

240 Hamburg or Rooted—This produces an edible root resembling a small parsnip both in color

PARSLEY—Cont'd

Flesh white, flavor similar to Celeriac. and shape. Foliage is about the same as plain parsley. Roots are extensively used for flavoring soups and stews and can be dug late in the fall and stored in sand for winter use.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

241 Plain - A hardy variety having very dark green leaves which are flat, deeply cut but not curled. It is a little stronger in taste and much esteemed for flavoring soups, stews, as well as for drying.

Pkt., 10c; oz., 15c; 1/4 lb., 40c.

PARSNIPS

A popular vegetable for fall and winter use and of wonderful value for stock feeding. On rich, loamy soil produces immense crops, more nutritious than turnips and very valuable for dairy cattle. It will remain in the ground without protection all winter and can be dug as required until it begins to go to seed in the spring; or if desired, store in pits or cellars.

Culture—Sow in April in drills 18 inches apart, covered lightly. When the plants are about 2 inches high, thin out from 4 to 6 inches apart. One ounce will sow 200 ft. drill. 5 to 6 lbs. to the acre.

242 Large Sugar or Hollow Crown (Guernsey) One of the best and most popular varieties for the table. Roots long, uniform in shape, have a smooth, white skin, tender and of good quality.

Pkt., 10c; oz., 15c; ¼ 1b., 35c.

PEAS—GARDEN VARIETIES

One of the most popular crops in the home garden and usually a profitable one for market gardeners where labor for picking can be readily obtained. One pint sows 75 ft., 1½ bu. per acre. The earliest sorts can be planted just as soon as the ground is in condition to work. Wrinkled varieties a little later as they are tender. For succession, plant different sorts. For fall crop sow in August.

One pint planted every two weeks will yield a succession and is enough for a medium sized

garden.

Culture—Peas succeed best in light, rich, loamy soil which has been manured the previous season. Sheep manure or good commercial fertilizer in the drills mixed with the soil will give excellent results. Sow about one pt. per 100 ft. or 120 lbs. per acre. The early dwarf varieties can be planted in rows 2 feet apart. The tall varieties in rows 3 ft. apart. Peas can be staked with sticks or wire netting on stakes. Tall varieties yield more abundantly than dwarf. Cultivate and keep clean, working the earth toward the vines rather than away from them.

Packets and ½ pints postpaid. If to be sent by mail add 7c to night prices and 10c to quart prices.

mail add 7c to pint prices and 10c to quart prices.
For Zone Rates—1 pint weighs about 15 ozs., 1 qt. about 30 ozs.

EARLY ROUND OR SMOOTH VARIETIES

244 Maud S-The earliest and most prolific pea known. The pod is of a dark green color, of a full, round shape and of strong texture which especially fits it for shipping long distances. For a late fall crop it has few equals and is the market gardener's favorite for all seasons. The far northern point at which our peas are grown renders them almost proof against cold and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this pea unequalled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts., \$1.75.

245 MC Extra Early—One of the best strains of extra early peas; producing abundantly. Vines grow 2 to 2½ ft. high; pods 3 to 3½ inches long, well filled with fine delicious quality peas. Not only is this probably the earliest of all garden sorts but its yield is so abundant that it is the most profitable variety of all for market gardeners, in addition to being the best early sort for home gardens. Seed is white, smooth, medium size. Vines thrifty, vigorous, robust and extremely productive.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts.,

Alaska-A favorite sort with Southern truckers, producing long straight pods which will stand shipping, remain green longer than white seeded sorts. The seed is blue, medium size. Vines about 2½ ft. high, Beed is blue, meaning size. This source good yields.

Padalone straight and attractive appearance. This Pods long, straight and attractive appearance. This has long been a popular sort, is of fair quality and well-known.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts.,



#MC Extra Early Peas

EARLY WRINKLED VARIETIES

These are of very much finer and superior quality to the smooth sorts, consequently are much to be preferred for private gardens or market uses, except for very earliest crops. They are not quite as hardy as the smooth varieties—hence, should be planted just a little later.

250 Gradus (or Prosperity)—One of the very best early wrinkled large podded peas. The pods are fully as long as Telephone. Vine similar in appearance and does not grow so tall, being of medium height about 3 to 3½ feet. The pods are 4 to 4½ inches long, pointed, handsome and one of the most attractive

PEAS-Cont'd EARLY WRINKLED VARIETIES-Cont'd

of the early wrinkled sorts. Peas very large, splendid quality and a beautiful light green color. This has quality and a beautiful light green color. become one of the most popular varieties in cultivation.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

251 Thomas Laxton—A very popular gardener's variety. Height, 3 ft.; vine and foliage moderately stout, medium green; pods 3½ inches long, straight and square ended, containing 7 medium dark green peas of excellent quality. Extremely productive.

252 Laxtonian—One of the largest podded of the dwarf wrinkled peas. Pods are about 4 inches in length, of a beautiful dark green color, similar to Gradus in shape, of splendid quality and mature a little earlier. Vine averages 15 to 18 inches in height, vigorous, productive and has dark green foliage.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

Little Marvel-An extra early dwarf wrinkled 253 sort particularly suited to home gardens. Vines average 15 to 18 inches high, vigorous, dark green foliage. Peas are borne together in pairs of twos. Though comparatively a new sort it has become exceedingly popular on account of its large productive yield.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

American Wonder-A favorite dwarf, early, wrinkled pea which is highly esteemed and splendid for family use. Vines about 9 inches to 1 ft. high, covered with well-filled pods medium size, about 23/4 inches long, containing 5 to 8 large, exceedingly sweet, tender peas.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

255 Nott's Excelsior—A few days later than the American Wonder. Pods about one-quarter larger. It is remarkably hardy and can be planted almost as early as smooth sorts. Height, 1 to 1½ ft. One of the best for home gardens and a profitable variety for market gardeners.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

MEDIUM CROP VARIETIES

257 Premium Gem-This has long been a favorite among early dwarf peas. It matures a little later than American Wonder, is somewhat taller in growth and a little more prolific. Vines vigorous and productive, growing 15 to 18 inches high; pods 234 inches long, crowded with peas of fine quality.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts.,

259 Daisy or Dwarf Telephone—Similar in general characteristics to the well-known Telephone. Pods 41/2 to 5 inches long, dark green; peas large, of superior quality, tender and sweet. Vines about 3 ft. high.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 50c; 4 qts.,

\$1.75.

LATE OR MAIN CROP VARIETIES

260 Telephone-One of the leading peas with market gardeners on account of its vigorous, tall growth and productiveness. Vines about 4 ft. high, foliage light green, producing an abundance of pointed pods, very large and light green. Peas large, tender, very sweet, excellent flavor. A splendid sort for home gardens and profitable for market.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts.,

\$2.00.

261 Alderman—A new pea like the Telephone, only better. The vine is extra vigorous, and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the finest of the large-podded summer varieties. The haulm grows five feet in height and is of a rich, dark green color, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.



264 Melting Sugar (Edible Pods)—These are used in the same manner as Snap or String Beans, the pods and peas being sliced and boiled. Pods very large, 4½ inches long, broad, curved and twisted. They are when young, very tender, stringless and fine flavored. Vines are tall, 4½ to 5 ft. high, with light foliage; are very strong growing and prolific. We strongly recommend more extensive planting of these fine quality peas. They are very popular in Europe and should become more generally known in this country.

Pkt., 10c; ½ pt., 20c; pt., 30c; qt., 55c; 4 qts., \$2.00.

Inoculation for Peas—Excellent results will be obtained by treating the seeds of peas with Inoculation Bacteria before planting. It can be easily done. We have it put up in convenient size for small gardens. (See page 59.)

PEANUTS

Peanuts should be shelled before planting. They should be planted in May or early June, in rows about 2 to 3 feet apart, dropping the nuts 8 to 10 inches apart, 1 in a hill. Cover 1 or 2 inches deep. Cultivate 3 or 4 times with a cultivator, so as to loosen the earth and keep down weeds, and at the last working, with a small turn-plow throw the dirt to the nuts. Do not cultivate too late in the season, as late cultivation is likely to injure the formation of the nuts. It is also advisable

to make an application of lime, scattering it on top of the row just after planting. The use of lime as above men-tioned is recommended by the most successful growers.

In harvesting, plow the peanuts and then stack around stakes with the leaves outside.

265 Improved Virginia-Large size nuts which are very popular and a fine productive strain.

½ lb., 20c; 1 lb., 30c.

PEPPER

Culture—For earliest crop sow in hot bed in February or March and transplant to open ground in May, setting plants about 15 inches apart in rows 2½ ft. apart. Later crops can be sown in cold frames. Cultivate and keep free of weeds. Sheep manure or some good commercial fertilizer applied broadcast around the plant and hoed in when they are about 6 inches high will produce an enormous increase and improvement in yield.

One ounce makes from 1200 to 1500 plants.

266 California Wonder—Resembles Chinese Giant in the large size and blocky form of its fruit, but having an extremely thick flesh not possessed Fruit crimson, measuring 4½ by that variety. inches in length by 4 inches in diameter, mild and sweet.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

267 Harris' Early Giant—A very large, sweet pepper. Plants produce enormous yields and the peppers mature earlier than any other very large kind with which we are acquainted. Fruits are 5 inches high and $3\frac{1}{2}$ inches through; deep green turning to brilliant red. Flesh thick and of a very sweet, pleasant flavor. This will be found a very valuable pepper for the home garden and a profitable one for market.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

Chinese Giant-An enormous variety sometimes attaining 6 inches in diameter. It is very even in shape, flesh thick and sweet. Very handsome and of superior quality for stuffing. Plants are vigorous and fairly prolific. Very highly recommended for home use and one of the most profitable to grow for market purposes. Pkt., 10c; oz., 50c; ¼ lb., \$1.75.

269 Large Bell or Bull Nose—A large early sort of mild flavor. Plant vigorous, 2 feet high, very productive, and ripens its crop early and uniformly. splendid sort for salads, mangoes and for stuffing purposes. Color deep green which becomes bright crimson when ripe.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

270 Ruby King—A very large and attractive sort, deep green color when young, bright red when ripe. Flesh thick and mild flavor. One of the best table sorts.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

Ruby Giant-A variety of Mango Pepper, which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant grows to large size and is very mild.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

272 Long Red Cayenne—A well-known medium early sort, having slender, twisted and pointed fruits about 4 inches long. Extremely strong and pungent—hence, valuable for seasoning. Generally known as Lady Finger Pepper.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

273 Sweet Mountain (or Spanish)—Late maturing and an attractive sort. Fruits very large and long, frequently 7 inches in length and 2 inches in diameter; flesh mild, very thick and excellent quality.

Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

Golden Dawn-A handsome sweet, mild, yellow variety; fruit pendent, one and a half inches long and about the same in diameter.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.50.

Red Chili-Pods about 2 inches in length. 1/3 to 1/2 inch in diameter, tapering to a sharp point. Exceedingly pungent—hence, valuable for flavoring and for Tobasco Sauce. The small bright red pods are borne in great profusion, making it an ornamental plant for the garden.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.50.

276 Pimento—The fruit is of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruit is deep green when young, becoming deep red as it matures.

Pkt., 10c; oz., 30c; 1/4 lb., \$1.00.

SELECT SEED POTATOES

CHOICE NORTHERN GROWN STOCKS

Prices on Potatoes are constantly changing, subject to market fluctuations. Please write for current market prices when ready to purchase.

Culture—Potatoes are planted in rows 36 to 40 inches apart, dropping the potatoes 12 to 16 inches apart in the rows. Sheep manure or some other good commercial fertilizer should be used in the drills even if the land is heavily manured as it will pay wonderfully well. It takes about 1 pound of fertilizer to 30 to 40 feet of drill, 400 to 600 lbs. per acre. It takes 9 to 12 bushels to plant an acre according to size of potatoes and distance of rows apart. Plant for early crop as soon as the ground can be gotten in condition. For late crop, in July or 1st of August is best.

Many potato diseases particularly the more

Many potato diseases, particularly the more important ones, such as scab, black leg, black rot, stem rot, etc., were formerly treated by the old-fashioned methods which required soaking of the seed for long periods and creating a disagreeable task.

The introduction of Improved Semesan Bel has vastly improved these conditions by giving the grower a modern, instantaneous and effective method of disinfection at a reasonable cost that is far superior in all respects to even the best of those previously employed. See page 76.

Early Ohio—The most popular early variety. The tubers are oval, have few eyes, rather shallow. Smooth skin, white, slightly flushed with pink. It is an extra fine quality cooking potato; makes good sized yields and is a favorite in this section and many others, especially where planted on light and loamy soil

Irish Cobbler-This has become an exceedingly popular and profitable variety for growing for market. Tubers are oval with smooth white skin, have few eyes rather deep. Grows to large size and produces enormous yields. Vines are thrifty and a reliable heavy yield can nearly always be expected. An excellent sort for market purposes and produces good crops both early and late.

SWEET POTATOES

We carry in stock the best sort of seed grown by reliable planters. Varieties, Yellow Jersey and Nancy Hall. Prices variable. Write for quotations. Cannot be shipped until about April 1.

PUMPKIN

These make excellent food for stock and can be grown in corn fields at practically no extra expense. We urge larger planting, as they are very nutritious and afford a change in ration.

Culture—Generally planted in corn after the last working and gathered after corn has been shocked. For field crop, plant in May or June in hills 8 feet apart, about 8 to 10 seed to the hill and cultivate until the vines get strong; then thin out leaving 2 or 3 of the strongest plants in each hill.

One ounce plants 20 to 30 hills according to the size of the seed. Two or three pounds to the acre.

280 King of the Mammoths—An enormous flattened variety sometimes attaining 100 lbs. in weight. It is especially desirable for exhibition purposes, Halloween parties and will find ready sale in most large cities at good prices.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

281 Japanese Pie—Fruit medium size. Skin light yellow, covered with fine grained netting. Flesh salmon, very thick, sweet, fine flavor and one of the best sorts for cooking.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.

282 Tennessee Sweet Potato—Medium size of creamy yellow color with light green stripes. Flesh thick, fine grained, dry, brittle and of excellent flavor. Unsurpassed for pies and custards.

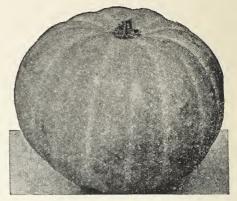
Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.

283 Cushaw Crook-neck Striped—Fruit fairly large with crooked neck. Skin creamy white with green stripes. Flesh yellow, very thick, rather coarse but sweet. A productive and popular sort in most sections.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.

284 Golden Cushaw—One of the best varieties. Is a yellow crook-necked sort, and is nearly all flesh, having a very small seed cavity.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ 1b., 30c; 1 1b., \$1.00.



King of the Mammoths

285 Large Cheese—A popular sort in this section for table uses and stock. Fruits somewhat flattened; skin mottled light green and yellow. Flesh yellow and of tender quality.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 70c.

286 Small Sugar—One of the best for the home garden. An excellent variety for pies. Nearly round, 10 to 12 inches in diameter; rich orange color. Flesh thick, fine grained and very sweet.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.

287 Connecticut Field—Used for planting in corn for stock feeding and also for making pies. Fruits often 15 inches in diameter; smooth reddish-orange ribbed skin with orange-yellow flesh.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

288 Kentucky Field—Grown generally throughout the central section for stock feeding. Fruits very much flattened, creamy yellow color; flesh orange. Very productive.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 60c.

RADISH FINEST SEED STOCKS One ounce sows 100 ft. of drill. If broad-

One ounce sows 100 tt. ot drill. It broadcasted requires 10 to 12 lbs. per acre. For forcing in frames sow in January or February. Out of doors, sow from March to June for early and summer crop. For late, sow from July to September. Early sorts mature and are ready for the table in 21 to 30 days from sowing.

Culture—Quick growth is essential for tender, crisp radishes. Hence, rich soil and plenty of moisture are essential. They can be sown at intervals of ten days to two weeks for early use or grown as a catch crop between rows of beets, lettuce, onions, etc. When forced they requireplenty of ventilation and moisture.

ROUND VARIETIES

290 Early White Tipped Scarlet—One of the handsomest of the turnip varieties and a general favorite in nearly all large markets. It is ex-

a general favorite in nearly all large markets. It is excellent as a forcing sort or for earliest planting outdoors. Roots nearly round, slightly flattened on under side. Color very deep scarlet with distinctive white tip. Flesh white, of best quality. We strongly advise more extensive planting of this sort in this locality.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.



Early White Tipped Scarlet Radish

RADISH—Cont'd

ROUND VARIETIES-Cont'd

291 Early White Turnip—Similar to Early Scarlet Turnip but little more flattened and slightly earlier maturing. It has very small tops, is of quick growth, suitable for forcing or early planting. Color clear white; flesh crisp and tender.

Pkt., 10c; oz., 15c; \(\frac{1}{4} \) lb., 25c; 1 lb., 85c.

294 French Breakfast—A small olive-shaped variety about 11/2 inches long, which is very quick growing. Color beautiful deep scarlet shading to white at the Top small. Quick maturing and splendid for very earliest crop.

Pkt., 10c; oz., 15c; \(\frac{1}{4}\) lb., 25c; 1 lb., 85c.

Crimson Giant—This variety is suitable both for forcing or early planting out of doors. A remarkable feature of this radish is that it will grow double the size of other round red forcing radishes and still remain solid. The ordinary forcing radish, after growing to the size of 2 inches in circumference becomes pithy, while the Crimson Giant will grow to 6 inches in circumference, and still remain solid and juicy, free from all signs of becoming soft.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

296 Early Scarlet Turnip—A well-known sort producing round or oval roots of bright scarlet color. Flesh white, crisp and tender. Tops medium, quick growth and desirable for early planting.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

297 Extra Early Scarlet Globe-One of the very best and most showy radishes for earliest forcing or growing outside. Roots are slightly olive shape, rich bright scarlet color; flesh white and tender. It is fit to pull very early and is especially desirable for market gardeners on account of its showy qualities.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

LONG VARIETIES

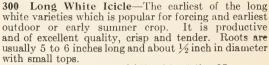
298 Cincinnati Market—A popular sort in this section and has long been a favorite with market gardeners as it commands ready sale and good prices on

this and nearby markets. It is a brilliant crimson color with white slightly tinged flesh, exceedingly sweet and tender. Grows 6 to 7 inches in length. straight and smooth and does not become hollow and pithy until very old. A remarkably fine sort for either market or home

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

299 Long Scarlet Short Top-An old standard sort which is excellent either for home gardens or market. Tops short and small. Roots smooth, tender, uniform in shape; an attractive bright red color.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb.,



Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

White Strasburg—One of the most popular and desirable of all long white radishes for second early or summer crop. Even when comparatively small it is fine quality and remains crisp and tender much longer than other early varieties. Roots when full grown are $1\frac{1}{2}$ to 3 inches thick and 5 to 6 inches long, tapering. Tops medium; roots smooth, crystal white color, handsome, showy, crisp and tender and especially desirable for market or family use.

Pkt., 10c; oz., 15c; ½ 1b., 25c; 1 1b., 85c.

FALL RADISHES

303 Long Black Spanish—A favorite late sort producing long, thick, almost black roots, with white flesh of fine texture. Decidedly pungent but well flavored. Roots are usually 7 to 9 inches long, 2 to 3 inches in diameter and it is one of the best of the long. inches in diameter and it is one of the best of the long sorts and especially adapted for winter use.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

305 Rose China Winter (Scarlet China)—A popular sort producing cylindrical roots, stub-rooted, blunt at both ends. Is bright, deep rose color shading to white. Skin smooth, flesh white, crisp, tender and pungent. Roots usually 4 to 5 inches long, 1½ to 2 inches in diameter. A splendid sort for fall and winter.

Pkt., 10c; oz., 15c; \(\frac{1}{4} \) lb., 25c; 1 lb., 85c. 306 White Chinese or Celestial-A large stumprooted radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition a long time; mild in flavor, brittle and never

woody. Fine for market gardeners.
Pkt., 10c; oz., 15c; ½ lb., 25c; 1 lb., 85c.
307 California Mammoth White Winter—A giant fall and winter variety. Roots from 9 to 12 inches long and 2 to 3 inches through, tapering regularly to the tips, smooth and cylindrical in form; skin and flesh white, tender and crisp.

Pkt., 10c; oz., 15c; ¼ lb., 25c; 1 lb., 85c.

SALSIFY

A desirable winter vegetable which should be more extensively used throughout the Central States. Roots are palatable and can be served boiled or as fritters.

Culture-Sow in April in rows 18 inches apart, thinning out to 4 to 6 inches. tunning out to 4 to 6 inches. Cultivate deeply and often. It is hardy and will remain out all winter, but if desired can be dug before winter and stored in earth or sand to keep it from wilting. to keep it from wilting.

One ounce sows 100 ft.; 6 to 8 lbs. are required per

309 Mammoth Sandwich Island-The best sort, which is much larger and a great improvement over the old-fashioned long sort.

Pkt., 10c; oz., 20c; ¼ lb., 60c.



Mammoth Sandwich Island Salsify



White Icicle Radish

SPINACH

Has long been one of the most popular of all greens for market gardeners and truck growers and in some sections is grown in enormous quantities. In this locality Spinach is sown broadcast in March or April for early crop and from July to September for fall and winter crop at the rate of about 10 to 15 lbs. per acre. It can also be sown in drills 12 to 15 inches apart and cultivated.

One ounce sows 100 ft. of drill. 10 to 15 lbs. per acre in drills. 15 to 20 lbs. per acre, broadcast. One-

half pound is sufficient for a medium garden.

310 King of Denmark — The New Evergreen Spinach. This variety is superior to all others for spring planting, under the same circumstances, in the matter of standing a longer time before going to seed. Has an abundance of dark green leaves of large size and very much crumpled and of fine quality. It is fit for use in thirty days from time of sowing, and remains in good condition fully two weeks after other varieties have started seed-stocks.

Pkt., 10c; 1 lb., 25c.

Bloomsdale Savoy (or Norfolk)—A very early sort especially desirable for fall use. Plant is upright, having glossy, thick, crimpled, green leaves, pointed. A favorite sort for market gardeners and truckers.

Pkt., 10c; 1 lb., 25c.

312 Round Thick Leaf-One of the best sorts for spring sowing as it is somewhat slower to go to seed than Bloomsdale. Plant upright, vigorous; leaves large, thick, fresh bright green color.

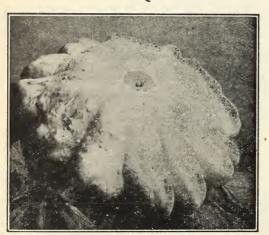
Pkt., 10c; 1 lb., 25c.



Bloomsdale Spinach

313 New Zealand—An especially desirable sort for summer use as it thrives during hot weather in any soil, rich or poor. It has tender shoots of good quality which may be cut throughout the summer. Plant becomes very large and spreading, leaves small, broad and pointed. Plant 3 or 4 seed in hills 2 ft. apart each way. Germination will be hastened by soaking in warm water 24 hours before planting. Pkt., 10c; oz., 15c; ¼ 1b., 30c.

SOUASH-Called Cymling in the South



Mammoth White Bush Squash

Summer squash requires one ounce to 30 hills. Winter varieties one ounce to 15 hills and 3 to 4 lbs.

Culture—Plant when the weather has become settled and the ground fairly warm. Bush varieties are planted 3 x 4 ft.; running varieties 6 x 8 ft.; about 4 to 6 seeds per hill and thin out later leaving the strongest plants about 3 to the hill. Hills similar to those made for Cucumbers with well-rotted manure or fertilizer are best. Winter varieties may be stored in a moderately warm dry place of even temperature. of even temperature.

SUMMER VARIETIES

315 Mammoth White Bush-A well-known early variety, largely planted in the South both for market and home use. Color is creamy white with comparatively smooth surface, somewhat flattened and scalloped. Vines are bushy, vigorous and very productive. Known as Patty Pan or Cymling in the South.

Pkt., 10c; oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00.

Golden Summer Crook-neck—An old standard running sort having long fruit with uniformly crooked neck. Color is bright yellow; densely warted surface and very productive.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

WINTER VARIETIES

318 Improved Hubbard—One of the best winter squashes; flesh bright orange yellow, fine grained, very dry, sweet and richly flavored. Fruit large, oval-shaped; skin dark green, rough, covered with warts. Excellent keeper.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25. Golden Hubbard-Similar to the old Hubbard excepting the skin is of a rich orangered and heavily warted, flesh of extra fine quality.

Pkt., 10c.; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25. 320 Warted Hubbard-Similar in fruit and shape to Hubbard except that the surface is very much warted. It is very handsome in appearance and extra quality.

Pkt., 10c; oz., 15c; \(\frac{1}{4} \) lb., 40c; 1 lb., \(\frac{1}{2} \).



Hubbard Squash

SOUASH-WINTER VARIETIES-Cont'd

321 Mammoth Chili-Rich orange-yellow; flesh thick and of good quality for making pies; grows to an enormous size; a valuable sort for feeding stock.

Pkt., 10c; oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25.

322 Boston Marrow-Vinesstrong, of running growth and very productive. Fruits large, orange skin, deep orange flesh, oval with hard shell; a superior winter sort.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

TOMATO

Culture—For earliest crop sow in a hot bed or shallow boxes in February or March, transplanting when 2 or 3 inches high to small pots, trays or cold frames. When danger of frost is past (usually in this climate the 1st to 10th of May), set in open ground 3 x 4 feet apart. Well-rotted manure, sheep manure or other good commercial fertilizer should be used in the hills at the rate of a dessert spoonful per hill or about 200 lbs. per acre mixed with the soil. It is essential for producing good stocky growth that the soil be enriched in this manner as it will have a tendency to prevent blight and add vigor and fruitfulness to the vines. Tomatoes should be staked to keep the fruit from the ground and it will help also to prevent blight, mildew and make them more prolific.

One ounce produces about 3,000 plants: 2

One ounce produces about 3,000 plants; 2 ounces produces enough plants to set one acre. For early crops sow in February; for late crop sow in open bed in April or May.

WILT RESISTANT TOMATOES

The loss caused by tomato wilt is increasing each Wilt is a fungus that lives in the soil and invades the plant through its roots. When diseased tomato vines are plowed under they only serve to increase the infection. In the early stages of the disease the leaves curl, later they turn yellow, beginning at the bottom of the plant which slowly dies, usually about the time the fruits are half grown. No amount of spraying will do any good, the only means of controlling wilt is to grow wilt resistant varieties.

"Break O'Day"—This new early wilt-resistant tomato was developed by Prof. Pritchard of the U.S. Department of Agriculture at Washington. It is a cross between Marvana and Marglobe. fruit is the same color, shape, size and solidity as Marglobe, but ripens 10 to 15 days earlier. A wonderful yielder and the only extra early tomato that is of a deep globe shape and good bright red color. Very solid fruits and few seeds; does not crack, making it a wonderful shipper.

Pkt., 15c; oz., 75c; 1/4 lb., \$2.00.

325 Marglobe—Wilt Resistant—Very productive second-early variety. Fruits large, smooth, meaty, red, globular. It will stand up longer after it becomes flushed than any other variety of tomato. Highly resistant to wilt and somewhat resistant to blights.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

326 Norton-Wilt Resistant-Norton was developed from the Stone, ripens at the same season, and can be classed as a wilt resistant Stone, but a more abundant bearer and the fruits are more solid. yields a heavy crop of large, smooth, solid red fruits that ripen slowly, therefore is a good keeper and a good shipper; it is also remarkably drought resistant. An excellent tomato for home garden, for canning and for the late market.

Pkt., 10c; oz., 25c; 1/4 lb., 75c.

Marvana-Wilt Resistant-This variety is commanding attention on account of its remarkable wilt-resisting qualities. A first-early red-fruited variety resembling Earliana in earliness, size, shape of fruits and in type of foliage, but its fruits are usually smoother, more crimson and slightly less acid. A heavy yielder of excellent quality.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00.

EARLY VARIETIES

328 Oxheart—Because of its Oxheart shape, large size, as well as excellent table qualities, it has quickly come into general favor. The skin is pink and the flesh frequently shows 2 inches thick, without a seed cavity. The flavor has that delicious tomato quality that every lover of this fruit knows so well.

Pkt., 10c; oz., 75c; 1/4 lb., \$2.00.

329 Purple King—One of the largest and best of the purplish pink varieties. Vines very vigorous and productive; fruits smooth, uniform in size, nearly globe shaped. It is an extremely early sort and of excellent We strongly recommend it for market quality. gardens and it will prove one of the best sorts for home gardens and it win prove one of the best sorts for home gardens for early use. It is especially valuable for shipping. Purple King will become popular wherever grown. It is a very large, early sort and its freedom from cracking and tendency from blight are strong points in its favor.

Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

330 Earliana—A deep scarlet, very early variety which is largely planted by truckers and market gardeners. Fruit is borne in clusters, is medium to large, nearly round, and exceptionally smooth for so early a variety. On account of its extreme earliness and the fact that the crop ripens uniformly and very early it is one of the most valuable of the first of the early sorts.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00.

June Pink-An extra early purplish-pink sort similar to Earliana except in color. It is a valuable variety for market gardeners and truckers, especially on markets where purplish sorts find ready sale.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

Chalk's Early Jewel-A particularly desirable sort with purplish scarlet fruit, nearly round, smooth, of large size and a most excellent quality. Fruit ripens early and not inclined to crack, is early and pickings are extended over a long season. One of the best of the early sorts and unsurpassed for home gardens.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00.

333 Dwarf Champion—An early variety which is very dwarf growing. The vines are so stiff that they are generally self-supporting. Fruits medium size, purplish red and borne moderately early. On account of its strong, upright growth, it is sometimes sold as Tree Tomato and is desirable on extremely rich soil and where tall varieties have a tendency to make too much

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.



Marelobe Wilt-Resistant Tomato

TOMATO—Cont'd



Ponderosa Tomato

EARLY VARIETIES-Cont'd

334 John Baer—An extra early scarlet fruited variety of superior merit. The vines are very hardy and exceptionally productive. The fruits are the largest of the extra early sorts and are also most attractive in They are nearly round, smooth, firm and of excellent quality. It is one of the very earliest to ripen its first fruits and it continues to furnish marketable fruits much longer than other very early varieties.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00.

Bonny Best-The fruits of this desirable early sort are most attractive in shape and color. The crop ripens more uniformly than any other early scarlet fruited sort, and is of superior solidity and interior color. The vines are vigorous and produce a good crop of exceptionally round and deep fruits, bright deep scarlet in color and of very good quality.

Pkt., 10c; oz., 35c; ½ 1b., \$1.00.

336 Early Detroit—A very productive second early purple tomato, uniform in size of fruit, free from cracks and does not blight easily. Fruit large and smooth. Vines vigorous and quite productive. Quality excellent.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

MAIN CROP SORTS

337 Ponderosa—One of the largest and finest varieties for home use. It is purplish pink in color. Vines vigorous, tall, fairly productive. Fruits are very solid and have exceptionally few seeds. It is fairly smooth for so large a variety and sometimes attains such a size that one slice will cover a dinner plate. Very free from acid, has few seeds, is of delicious flavor and most excellent for slicing; ripens about mid-season. On account of its thick meaty flesh and fine flavor it is most desirable for home use, and the large showy handsome fruits are popular sellers for fancy fruit stands.

Pkt., 10c; oz., 50c; 1/4 lb., \$1.50.

338 Beauty—One of the most satisfactory and popular sorts. Fruits are purplish pink, ripen evenly, are uniform in size, very solid and finest quality. They are exceptionally smooth and do not crack readily. Vines large, vigorous and very productive, ripening fruits about mid-season.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00.

339 Stone—One of the very best tomatoes producing large, very smooth, solid fruit slightly flattened, deep red color. It is very popular with all market growers and especially desired by canners. Ripens mid-season. On account of its large yield and general uniformity in production we strongly recommend it for both market gardens and home uses.

Pkt., 10c; oz., 25c; 1/4 lb., 75c.

Crimson Cushion or Beefsteak-Is very large, round and regular; bright scarlet skin, solid flesh of best quality, seed cells small. Plants are very prolific and of fine appearance.

Pkt., 10c; oz., 50c; 1/4 lb., \$1.50.

341 Trucker's Favorite—A large, deep purple variety, producing uniform size fruit. It is somewhat deeper color than Beauty; fruit being more globe shaped, largely used for main crop, producing fine yields of large, smooth, solid fruits which command best prices-hence very popular with truckers and market gardeners.

Pkt., 10c; oz., 35c; 1/4 lb., \$1.00.

Cincinnati Purple—A favorite sort in this locality and one of the very best for market or home use. It is very round, smooth, solid and of splendid flavor. Vines are vigorous and remarkably productive. Fruits of large size, very meaty; have small seed cells and of rich flavor.

Pkt., 10c; oz., 40c; 1/4 lb., \$1.25.

343 Golden Queen—A large growing variety bearing abundantly. Fruits are golden yellow color, smooth, well shaped and desirable for slicing as a contrast with red varieties on the table.

Pkt., 10c; oz., 50c; 1/4 lb., \$1.50.

SMALL-FRUITED TOMATOES

344 Pear-Shaped, Red—Fruits pear-shaped, about 2 inches long and of bright red color. A splendid variety for preserves.

Pkt., 10c; oz., 50c; 1/4 lb., \$1.50.

345 Pear-Shaped, Yellow-Fruits pear-shaped, about 2 inches long, rich clear yellow color, largely used for canning, tomato preserves and pickling.

Pkt., 10c; oz., 50c; 1/4 lb., \$1.50.

346 Red Cherry-Small, round fruit, resembling cherries; used for preserves.

Pkt., 10c; oz., 50c; 1/4 lb., \$1.50.

Yellow Cherry—Fruits 5/8 inch in diameter, perfectly round and smooth. A splendid sort for sweet or sour pickles and preserves.

Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

Tomato Plants-Leading varieties in season. We do not send these plants by mail.

TURNIP

One of the easiest crops to grow and profitable for stock feeding and in most cases for markets.

They cost so little to grow, make splendid nutritious feed and should be much more generally used. A good yield from an acre of Turnips is from 600 to 1000 bushels.

Culture—For early use, sow in March or April either broadcast, or in drills, using preferably Milan or Purple Top Strap Leaf or Globe.

Rutabaga is sown in June or July, preferably in drills 2 feet apart thinning out to 6 inches.

Turnips for main crop are sown from July to September 15th, broadcast 1½ to 2 lbs. per acre.

Turnips for greens, can be sown as late as October 1st and require 3 to 4 lbs. per acre.

348 Early Purple Top Milan—Extra early variety which is very sweet and particularly valuable for sowing in early spring. Roots are medium size, plants purple, top flat. Best for private gardens and preferable to grow for early market crop.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 85c.

349 Purple Top Strap Leaf—A well-known early sort which is largely used in all sections. Our stock is extra choice.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 65c.

350 Purple Top Globe—A very superior strain, producing large smooth roots, which are sweet and tender. One of the best for early or main crop use. Excellent either when young or fully matured.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 65c.

351 Early White Flat Dutch—Similar to Early Purple Top Flat, excepting that it is white all over. Quick grower, excellent quality and splendid for early crop.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 65c.

352 Large White Globe—Flesh white, firm and crisp; a very desirable early variety.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 65c.

353 White Egg—An early, oval variety with smooth, clear white roots, medium size which grow half out of the ground, top small, flesh clear white, fine grained, sweet. Excellent either when young or fully matured.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 65c.

354 Long White Cow Horn—These often grow 12 to 15 inches long and are a valuable crop for stock feed, flesh is white, well flavored and good for table use.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 65c.



Early Red or Purple Top Turnip

355 Yellow Aberdeen—A globe-shaped variety with purple top, flesh yellow, sweet, somewhat coarse grain, an excellent sort for stocks, producing large crop.

Pkt., 10c; oz., 15c; ½ 1b., 25c; 1 1b., 65c.

357 Seven Top—Used entirely for greens and very popular in the Southern States.

Pkt., 10c; oz., 15c; 1/4 lb., 25c; 1 lb., 75c.

RUTABAGA OR SWEDISH TURNIP

358 American Purple Top—Our stock of this is extra choice and can be depended on by the most critical growers. Rutabaga besides being best food for stock, is the sweetest of all Turnips for table use.

Pkt., 10c; oz., 15c; ½ lb., 25c; 1 lb., 75c.

French Turnip—(See Kohl-Rabi.)

TOBACCO

Saved from crown shoots only and grown for us by practical growers.

Culture—The seed is sown from February to April in open beds. Ground must be clean, very finely pulverized, raked fine and smooth. It is customary to burn over the top of the bed by piling brush or litter to destroy weed seeds and add fertility for the young plants. After sowing, beds are protected with thin cotton cloth similar to cheese cloth to protect them from tobacco files. About June 1st it is set in rich or highly fertilized ground in rows $2 \frac{1}{2} x 3$ ft. Cultivate often and destroy worms by applying Paris Green or Arsenate of Lead.

One ounce sows 50 sq. yds., sufficient to set 2 or 3 acres, sheep manure will give most excellent results on this crop and should be applied in hills two to three hundred pounds per acre.

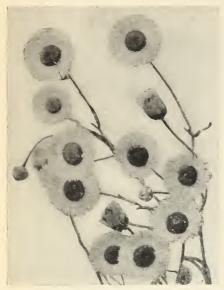
359 Improved White Burley—A standard sort which is more largely grown in Blue Grass region of Kentucky, Ohio, Tennessee and Missouri than any

other sort. It is a large growing sort having very broad leaves of finest quality and largely used for fine bright leaf, especially for cigarette tobacco, fine bright mixing tobacco and outside wrappers for plug. Commands highest prices on the market and where soil is suitable the most profitable of all sorts.

Pkt., 10c; $\frac{1}{4}$ oz., 20c; oz., 50c.

360 Stand-up Burley—Has all the good qualities of White Burley but superior to that variety in many respects. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence, the name "Stand-up". It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections.

Pkt., 10c; 1/4 oz., 20c; oz., 50c.



Erigeron Divergens



Gentiana Hascombensis



Gerbera Transvaal Daisy

Flower Seed Novelties

The descriptions are those of the raisers

THE NEW ENGLISH MAJESTIC SNAPDRAGON

This new class of Snapdragons will produce flowers as large as the tall giant varieties, however, they are not as tall, being more compact and of a very sturdy growth.

520 Majestic Eldorado—This Novelty is of a deep golden-yellow, quite the richest tint yet produced in Snapdragons. 12-02., 75c. Pkt....20c 524 Majestic Rose Marie—A novel shade, being a light salmon-rose with a golden center. 13-02., 75c. Pkt.....20c

AQUILEGIA (Columbine)

range of colors. Pkt.

544 Crimson Star—The novelty we here offer bears flowers of a brilliant dark crimson which being borne profusely on the plant forms a most attractive subject for the border. This shade is a welcome addition to the long-spurred class. The raiser claims that it will come reasonably true to color from seed. Pkt.

3

DELPHINIUM

ERIGERON

GAILLARDIA

700 "Torchlight"—Few plants can rival the perennial Gaillardia for gorgeous effect in the border from mid-summer onwards, the main drawback being a somewhat loose and untidy habit. In "Torchlight," however, the stems are much stronger and stiffer than in any variety hitherto produced, making the habit much more compact and they attain a length of 2 to 2½ feet. The flowers are golder-yellow with a rich maroon-red center and often measure as much as 5 inches across. Both for the border and for cutting, this new Gaillardia will be found of the greatest value. Pkt...35c

GENTIANA

GERBERA (Transvaal Daisy)

706 Jamesoni—Large daisy-like blooms on long stems in shades of yellow and red, attracting attention everywhere. Thrives well as a pot plant or in greenhouse benches. May also be grown in the open, if provided with winter protection. Height, 18 inches. Half-hardy perennial.

MARIGOLD

761 Guinea Gold—This is a very distinct type of Marigold, of graceful pyramidal habit, growing 2 to 2½ feet high, and producing 30 to 40 flowers, 2 to 2½ inches across, of a brilliant shade of orange flushed with gold. Unlike the ordinary African Marigold, this new variety produces no single flowers, but practically 100% semi-double. The characteristic Marigold odor too, is much less pungent than in other sorts. Pkt..........................25c

NEW DOUBLE AFRICAN MARIGOLDS

The two varieties offered below were developed in California and are a decided improvement over the ordinary African type, being practically all double.

Our General List of Flower Seeds are also of the best and price moderate.

Flower Seed Novelties—Cont'd

The descriptions are those of the raisers



Papaver Orientale, "The Feltham"

PAPAVER (Orientale Poppy)

823 The Feltham-Some sixteen years ago was originated at the Feltham grounds in England; a new departure in Orientale Poppies, and by dint of continual selection, succeeded in fixing a distinct and valuable strain. It has all or nearly all the various shades of the type—scarlet, orange, apricot, etc., but with no black blotches at the base of the petals. The flowers are thus all

MECONOPSIS

769 Meconopsis Baileyi-This beautiful blue perennial Poppy, brought over from Tibet by Captain Kingdon Ward, throws up from its root stalk half a dozen leafy stems, 2 to 3 feet high, well furnished with broad sea-green leaves and bearing freely at their heads large four-petalled blooms of a glorious skyblue color; the effect of which is enhanced by a central zone of golden-yellow anthers. This superb plant has been accorded by the Royal Horticultual Society a First Class Certificate and an Award of Merit. It is hardy, and should soon become one of the most popular plants in cultivation. Sow in pans or boxes

A NEW DOUBLE SWEET-SCENTED NASTURTIUM

775 Golden Gleam—The plant forms a vigorous, large bush which throws out short runners, averaging eighteen inches. The double flowers commence out short runners, averaging eighteen inches. The double flowers commence to come as soon as the plant nears complete development and at the time it

NEW ICELAND POPPY

829 El Monte-This is a deep tangerine-orange selection from the giant Australian hybrids. The flowers are of enormous size, borne on long wiry stems. It comes true to color, is extremely easy to grow and can be produced in six months from seed. It is fine for cutting. Hardy perennial. Pkt........25c

PRIMULA (Primrose)

The hardy Primrose is among our most delightful spring flowers. They require a partially shaded

POLYANTHUS (Bunch Primrose) Hardy Perennials thriving in full sun

URSINIA

922 Anethoides—This hardy annual is a native of South Africa, being easy to grow and the blossoms remaining open until dark. The plants form large tufts of leaves, from which spring up long wiry stems, bearing flowers of a rich orange-yellow, adorned by a beautiful ring of deep purple with spots of a darker shade. Excellent for cutting and for garden decoration.



Meconopsis Bailevi

Our Flower Seeds are secured from the best European and American Growers.

ROCK PLANT SEEDS

In the whole history of gardening there has never been so much interest taken in the cultivation of rock plants as there is today. Not very many years ago it was quite exceptional to find a rock garden worthy of the name in any but the largest of our private gardens. Today, however, a garden no matter how small, is not considered complete unless it contains a portion devoted to the cultivation of Alpines. Many Rock and Wall Plants may be easily raised from seed. Of those shown below, all are hardy and will succeed in our trying American climate.

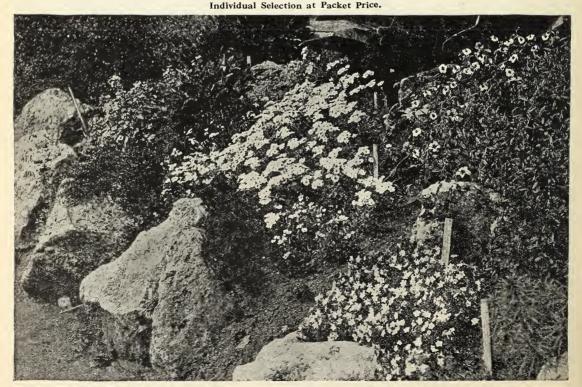
 675 Dianthus Caesius (Cheddar Pink)—Narrow, grey leaves with rose-pink, fringed, spice-scented blossoms. Pkt. 10c 680 Dianthus Granitus—Dwarf bright crimson. Of the same type as Dianthus Deltoides. Pkt. 10c 682 Dianthus Speciosus—Lavender-pink producing fragrant flowers with fringed petals. Pkt. 10c 717 Gypsophila Repens (Dwarf Baby's Breath)—Pinkish-white flowers. Pkt. 10c 719 Helianthemum Mutabile (Rock or Sun Rose)—Forms a low mat of glossy foliage which is hidden by a mass of rose, pink, white and yellow flowers. Pkt. 10c 724 Heuchera Choice Hybrids (Coral Bells)—Embraces every shade from white to bright coral red. Pkt. 15c 734 Iberis Sempervirens (Perennial Candytuft)—Cushion of Evergreen foliage with profuse white bloom from April to June. Prefers a sunny location. Height, 8 inches. Pkt. 15c 839 Primula Vulgaris (English Primrose)—Canary yellow, fragrant. Pkt. (Sowslips)—Mixed shades of yellow, very fragrant. Pkt. 15c 848 Primula Veris (Cowslips)—Mixed shades of yellow, very fragrant. Pkt. 15c 852 Saponaria Ocymoides Splendens—Elegant trailing perennial, with pretty, rich rose-colored flowers. Pkt. 10c 875 Saxifraga Species Mixed (Rock Foil)—This mixture contains both the mossy and the encrusted species in colors of white, blush, pink or crimson. Pkt. 25c 921 Tunica Saxifraga (Coat Flower)—Narrow, dark green foliage with small pale pink blossoms. Pkt. 10c

Rock Gardens, by F. F. Rockwell, shows just how you can build a rock garden yourself, on a small or large scale and at little expense. Describes the types of rock gardens, tells what soils, climates, and locations are best, how to construct and what to plant for the effect you want. 31 illustrations, 86 pages......\$1.00

For complete descriptions and cultural directions of all varieties offered above, together with list of Rock Plant Seeds not offered on this page, see varieties marked with a (**) on pages 35 to 53, inclusive.

The entire above collection of seeds for the Rock Garden, 25 varieties. \$3.20 value for \$2.20.

For other collection of Rock Plant Seed, see page 55.



Rock Garden

GENERAL LIST OF FLOWER SEEDS

With Valuable Cultural Hints

FOR NOVELTIES AND SPECIALTIES SEE PAGES 32 AND 33

Many years of experience and the observing of results has proven to us the importance of securing the best flower seeds obtainable; therefore, in presenting the following list for your selection, you will find only the best. Our strains of Delphinium are imported direct from Blackmore & Langdon at Bath, England; our Zinnias direct from the originator in California, etc.; all are acknowledged to be superior in all respects.

ALL FLOWER SEEDS ARE SENT POSTPAID.

RAISING PLANTS FROM SEED

Seeds of Annuals, unless otherwise noted, should be Seeds of Annuals, unless otherwise noted, should be started indoors in a light, sifted soil with sand and humus or clean leaf-mold added. Water the soil thoroughly, allow to drain and then sow seed thinly in rows. Cover with paper or glass to conserve moisture. Plant out when all danger of frost has passed. Some Annuals may also be sown where they are to flower, the young plants later being thinned out.

Hardy Perennial seeds may be sown from May to September. Sow in rows in light, sifted soil, same as for

Perennials when sown in pots or coldframes should be transplanted in rows in the open ground, allowing ample space for development.

When failure occurs we invariably find that the seed has been planted too deep or the soil has been permitted to become excessively dry or the reverse, while germination is taking place.

NOTE-We send out no untested seeds.

All varieties marked with a (***) throughout the list of Flower Seeds are especially suitable for the Rock Garden.

ACHILLEA (Milfoil, or Yarrow)

501 Ptarmica, The Pearl—A free blooming hardy perennial, bearing a profusion of small, double, white flowers on plants 2 feet tall, during July and August. Easily grown from seed, flowering the first season, if sown early. 18-oz., 55c; 1/8-oz., 95c. Pkt.....

ACONITUM (Monkshood)

Bold spikes of hood-shaped flowers, valuable for cutting; very effective in flower borders and shrubberies, thriving anywhere. Hardy perennial.

ADONIS

**503 Vernalis (Spring Adonis) — A very useful hardy perennial for the rock garden or border. Should be planted in a warm corner among Arabis, Aubrietias, Crocuses and Hepaticas. Grows 8 to 12 inches tall, bearing single, yellow, buttercup-like flowers during late March and April. Will grow in sun or half shade. Seed germinates slowly. 18-02., 35c. Pkt......10c

AGERATUM (Floss Flower)

A beautiful hardy annual which bears in dense clusters attractive feathery flowers which are very useful for bouquets or decora-tion. It grows in bush form and is desirable for outdoor bedding and borders, bearing profusely and covered with blooms nearly all

505 Little Blue Star—Compact with small, beautiful, mauve-colored flowers, suitable for edging or rockwork. Pkt...... 15c

506 Blue Perfection—A splendid dwarf bedding variety, the darkest of all blue ageratums. ¼-oz., 50c. Pkt.......10c

AGROSTEMMA (Mullein Pink)

Coronaria-Silvery foliage and bright crimson flowers; free-flowering hardy perennial of easy culture; blooms the first season; fine for cutting; 2½ to 3 feet; June to August. Pkt...10c

AMPELOPSIS VEITCHI

Boston Ivy-See page 55.



ALYSSUM

A hardy annual, which is useful for borders, edgings or massing in small beds. It blooms very early and is almost covered with clusters of trusses of small white flowers which are sweet scented having a peculiar, delicate fragrance.

***509 Carpet of Snow—The dwarfest of all Alyssums. Of creeping habit, forming a dense carpet of beautiful white flowers. Height, 4 inches. ½-oz., 25c. Pkt..........10c

512 Lilac Queen-Is of dwarf, compact habit and the deep lavender-like flowers are borne in profusion. 1/4-oz., 25c. Pkt. 10c

PERENNIAL ALYSSUM

■513 Saxatile Compactum (Basket of Gold)—Showy, bright yellow flowers, hardy perennials; excellent for rock work; 1 ft. 4-oz., 40c. Pkt.

•••514 Saxatile Compactum Silver Queen—Broad masses of pale lemon flowers in early spring. Useful in the border as well as in the dry wall or rock garden. Pkt......20c

ANCHUSA

ANEMONE (Windflower)

ANTHEMIS (Hardy Marguerite)



Antirrhinum Majestic Rose Marie

FIVE MAJECTIC SNAPDRAGONS

536 This collection contains one packet each: Delight, Orange King, Red Chief, Sunset and Twilight. (Value \$1.00) for . . 75c

DWARF SNAPDRAGONS

***state** small compact Rock Hybrids—Charming small compact plants with flowers in many different colors. Suitable for rock-garden planting. \(\frac{1}{16}\text{-}0\text{z}\), \(50\text{c}\); \(\frac{1}{2}\text{-}0\text{z}\), \(40\text{c}\); \(\frac{1}{2}\text{-}0\text{c}\), \(\frac{1}{2}\text{c}\); \(\frac{1}{2}\text{-}0\text{c}\); \(\frac{1}{2}\text{-}0\text{c}\); \(\frac{1}{2}\text{c}\); \(\



Antirrhinum (Snapdragon) Dwarf Rock Hybrids

ANTIRRHINUM (Snapdragon)

A very effective plant, easily grown, producing enormous spikes of many shades of color. Excellent for bedding and forcing under glass. Seed sown outdoors in early May will bloom from August to November. For early flowers, sow seed indoors in March and transplant the seedlings out-of-doors as soon as the weather will permit.

THE NEW MAJESTIC SNAPDRAGON

These giant-flowering, semi-tall Snapdragons bring us flowers as large as those represented in the tall giant varieties offered below. The plants, however, are not as tall and are therefore better suited for borders and beds. They form well-rounded, symmetrical bushes, growing about 2 feet tall.

- 520 Majestic Eldorado—This novelty is of a deep golden yellow, quite the richest tint yet produced in Snapdragons. 15-oz., 75c. Pkt.....20c
- 521 Majestic Golden Dawn—A distinct color—golden buff overlaid with salmon. The general effect is a light orange. 16-oz., 60c. Pkt...20c
- 523 Majestic Red Chief—A rich deep scarlet. Very bright. The individual blooms are extremely large. 16-oz., 60c. Pkt......20c
- 524 Majestic Rose Marie—A novel shade in this section, being a light salmon rose with a golden center. A little dwarfer and more even in its habits than the others of this class. \(\frac{1}{16} \- \text{oz.}, 75c. \quad \text{Pkt}. \quad \quad 20c
- 526 Majestic Twilight—A delicate apricot with an old gold center and salmon shadings. The general color effect is a rosy salmon. It exhibits the wonderful characteristics of the Majestic type; namely, giant blooms, compact habit and sturdy growth. 1/18-0z., 50c. Pkt......20c

TALL GIANT VARIETIES

Bearing large spikes of enormous flowers in many brilliant colors. Our strain is extra choice.

- 530 Indian Summer—Velvety copper-scarlet. ½-oz., 60c. Pkt....10c
- 531 Old Gold—Deep golden-yellow. ½-oz., 60c. Pkt......10c

HALF-DWARF VARIETIES

This class of Snapdragons attains a height of 18 inches, has a great range of color and is suitable for bedding.

535 Finest Mixed—All colors. 1/4-oz., 25c. Pkt...............10c

ARABIS (Rock Cress)

**539 Alpina—A hardy perennial and one of the earliest and prettiest spring flowers. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequalled for rockeries or edging; withstands the drought and is always neat; 6 inches. **\frac{1}{2}\cdot \cdot \c

■■540 Grandiflora Superba—Similar in every way to the above, but having improved habits with larger flowers. Pkt......15c

ARCTOTIS (Blue-Eyed African Daisy)

541 Grandis—Forms much branched bushes 2 to 3 ft. high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue; blooms early in July and continues until hard frost. It delights in a sunny situation. Half-hardy annual. 1/2-02., 30c. Pkt..10c

ARENARIA (Sandwort)

A very useful and lovely plant for the rock garden, easily raised from seed. Hardy perennial.

AOUILEGIA (Columbine)

This graceful Hardy Perennial is an ideal plant for partially shaded borders. As a cut flower it is noted for its beauty of form and richness of color.

Culture—Columbines, especially the long-spurred hybrids, thrive in a light soil, loose and fibrous, provided by adding peat and well-decayed manure. When planted in partial shade, the flowers develop better, grow larger and last longer. Easily raised from seed.

ARMERIA (Sea Pink or Thrift)



Aquilegia "Emperor"

ASTERS

CALIFORNIA GIANTS

A new variety of the Crego type, with the robust habit of growth and long stems of the Beauty type. The flowers are much larger and more substantial than the Improved Crego. They measure 5 to 6 inches in diameter and stand up well when shipped as cut flowers. Their immense size and beauty, as well as their long and sturdy stems, make them very attractive.

F 0

554	White—½-02., 50c. Pkt
555	Peach Blossom—1/8-oz., 50c. Pkt15c
556	Light Blue—1/8-oz., 50c. Pkt
557	Deep Rose—1/8-oz., 50c. Pkt
558	Dark Purple—1/8-oz., 50c. Pkt
559	Mixed Colors—¼-oz., 80c. Pkt
560	Collection, one pkt. each, above 5 colors, 60c.

ROYAL ASTERS

The Royal Asters are of comparatively recent introduction. They represent a most valuable branching type, blooming during mid-season. The flowers come in after the Queen of the Markets have passed and for many weeks are the main type of Asters found in the cut-flower markets. It is their long blooming season and excellent habit which has given them this foremost place.

The blooms are borne abundantly on long, strong stems. The habit of the plants assures them a place in the home garden, where they are wanted for beds or borders. The bushes grow 2 feet tall and branch freely near the ground, so that all the flowers can be cut with long stems.

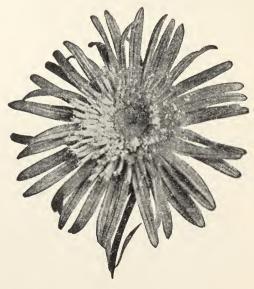
561	Lavender—1/4-oz., 55c. Pkt
562	Purple—1/4-oz., 55c. Pkt
563	Deep Rose—1/4-oz., 55c. Pkt
564	Shell Pink—1/4-oz., 55c. Pkt
565	White—1/4-oz., 55c. Pkt
566	Finest Mixed—1/4-oz., 40c. Pkt10c
567	Royal Collection—One pkt. each of the above 5
varie	ties

HARDY PERENNIAL ASTERS

THE SUNSHINE ASTER

A new semi-double type, introduced in England several years ago, but greatly improved by additional color selection. A most attractive variety. The plants are sturdy and strong, throwing up long flower stalks, making wonderful cut flowers. Some of the flowers have twisted petals and some have quilled petals; all have a cushion center of tiny quills of a contrasting color which makes a flower look as if it was covered with snowflakes. Illustrated below.

569	Blue—Pkt15c
570	Lilac—Pkt
571	Pink—Pkt
572	White—Pkt
573	Finest Mixed—1/8-oz., 60c. Pkt



Sunshine Aster

AUBRIETIA (False Wall Cress)

Lovely dwarf-growing perennial plants that should be enjoyed in more gardens. Their use is not confined to the rock garden but when massed on dry walls or along the edges of sunny borders with white Arabis and yellow Alyssum will give rich spreads of color. Moreover, they are easily raised from seed, blooming the second year. The plants should be well clipped over after flowering so that they will make a fine growth for next year's blossoming.

**574 Bougainvillei—Light violet-purple. Pkt15c
■■575 Eyrl—Large-flowered, dark violet-purple. Thrives in stony places or any garden soil. Full sun. Late April-May. Pkt15c
**576 Graeca—A compact large-flowered blue variety. Full sun. Mid April to late May. Pkt
**577 Leichtlini—Leaves grayish, usually evergreen. Color carminerose. Sun or half shade. Late April-May. Pkt20c
••578 New Large-Flowering Hybrids—Exceptionally fine strain, including a wide range of many unusual colors, which cannot be fixed and

BALSAM (Lady's Slipper)

An old-fashioned flower which is generally popular in all gardens. It bears flowers of various shades, white, pink, red, yellow, purple, etc., some of which are beautifully striped and spotted. Hardy annual.

Balsam Pear or Apple—See page 55.

Bachelor's Button—See Centaurea.

Black Eyed Susan—(Thunbergia.) See page 55.

BEGONIA

The following varieties of Begonia Semperflorens and B. Gracilis take rank as bedding plants with Geraniums and Coleus, doing equally well in full sunlight, and surpassing both in positions partially or wholly in shade. They are of sturdy growth, growing about 1 foot high, and forming dense bushes.

EVERBLOOMING BEDDING VARIETIES

The small, bright flowers are borne in great profusion from summer to autumn. Spring seedlings bloom in summer while summer seedlings make fine house plants for the winter.

TUBEROUS-ROOTED BEGONIAS

Tuberous Begonias are gorgeous plants for dense shade. They need 2 to 3 inches of very rich soil and bountiful supplies of water at all times. The flowers are marvelous in color and size and contrast wonderfully with the foliage.

For greenhouse and for summer bedding these are unequalled. Seedlings raised in heat early in spring will flower the same summer. They bloom very profusely.

BELLIS PERENNIS (English Daisy)

A well-known dwarf growing plant which bears massive and very double aster-like flowers. It is very useful for borders or growing for cut flowers. Plants are about 6 inches high and bear in greatest profusion.

583 Giant Red—1-oz., 30c.; 1/8-oz., 50c. Pkt.......15c

584 Double Mixed—Large, double flowers, various shades, pink, red, white and other colors. 4-oz., 75. Pkt......15c



Aubrieta Eyri

BRACHYCOME (Swan River Daisy).

BROWALLIA

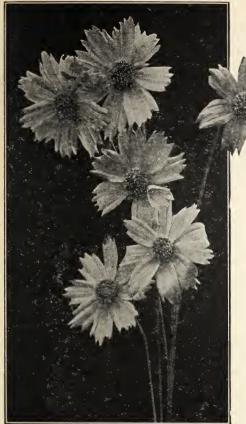
CALENDULA (Pot Marigold)

A hardy annual, which will grow and succeed in almost any garden. It produces a brilliant effect in beds and borders, being extremely free blooming and commencing early and continuing in greatest profusion until frost.

587 Campfire (Sensation)—Extremely large flowers; carried on long, stout stems. The color is a brilliant orange with a scarlet sheen and a full yellow center. ½-oz., 50c. Pkt....15c

CALCEOLARIA

Our Stock of Named Delphiniums contains the best New varieties.



Coreopsis Lanceolata Grandiflora

CARNATIONS

603 Marguerite—A very early blooming sort which some-times blooms in four months from sowing. Flowers are large, double, deeply fringed, very fragrant. Plants semi-dwarf, good for bedding and desirable for cutting. Annual. Finest mixed colors. 604 Hardy Border Double Mixed—A good hardy strain for outdoor culture, flowering the second season and producing a mass of flowers in a great variety of colors. 2 feet. Pkt....15c

CELOSIA OR COXCOMB

605 Glasgow Prize—Dwarf growing and bearing immense deep purplish-red combs; foliage dark but not abundant. Pkt..10c 606 Chinese Wool Flower—Plants grow 2 to 3 feet high, branching freely, each branch terminating with a large roundish head like a ball of wool or chenille of a rich, bright scarlet color. They bloom early and continue until frost, retaining their rich color. 3-0z., 30c. Pkt.

CALLIOPSIS OR COREOPSIS ANNUAL SORTS

One of the best annuals for beds or borders, producing attractive and graceful flowers on long stems which are most effective and artistic for decoration. They commence blooming early and continue in profusion until early fall. Seeds are usually sown outdoors where they are to bloom but they can be sown inside and transplanted if desired.

PERENNIAL VARIETIES

obsis.) This new double and selm-double form is just as easy to grow as the single and the extra petalage adds a further charm to the flower.

4-oz., 50c. Pkt.

Canna Roots—See Summer Flowering Bulbs.
Cardinal Climber—See page 55.

Canary Bird Flower—See page 55.

CANDYTUFT

Hardy annuals growing 12 to 15 inches high, of branching habit and producing in profusion large clusters of flowers which are splendid for cutting. They are excellent for borders or to plant in masses; also can be cutting. They are used for rockeries.

used for rockeries.

597 Glant Hyacinth-Flowered or Improved Empress—A wonderfully improved strain of the popular Empress Candytuft, forming much branched plants about 18 inches high. Makes a very effective white bed or border and is invaluable for cutting. Oz., 60c. Pkt. 10c.

598 Rose Cardinal—Bright carmine-rose. 4-oz., 25c. Pkt. 10c.

599 Flesh-Pink—Light pink. 4-oz., 25c. Pkt. 10c.

600 Crimson—Rich deep shade. Oz., 50c. Pkt. 10c.

601 Lavender—Delicate shade of rosy-lavender. Pkt. 10c.

602 Finest Mixed—Comprising all colors and shades. Oz., 25c. Pkt. 10c.

Perennial Candytuft—See Iberis, page 45.

CENTAUREAS

Under this name is included such popular annuals as the Cornflower, Sweet Sultans, etc. They are favorites in all sections of the country, are perfectly hardy, will grow and do well almost everywhere and are much in demand as cut flowers.

CAMPANULA

In this great family of plants are some of the loveliest and most enchanting of rock plants and alpines, as well as a great number of beautiful and useful plants for the open borders and for naturalizing in half-shaded wild gardens. Easily raised from seed and having the advantage of flowering late and giving blooms in the summer time when flowers in the rock garden or perennial border are scarce.

CAMPANULA (Canterbury Bells) CALYCANTHEMA (Cup and Saucer)

Sow these hardy biennials in early summer and transplant in autumn for flowering the following year. Height, $2\frac{1}{2}$ feet.

612 Blue—½-0z., 35c. Pkt. 10c

613 Pink—½-0z., 35c. Pkt. 10c

614 White—½-0z., 35c. Pkt 10c

615 Special Mixture—½-0z., 35c. Pkt 10c

CAMPANULA BELLFLOWER

The following Campanulas are all narry personal succeed in ordinary rich soil.

**•616 Carpatica, Blue (Carpathian Harebell)—Free-flowering hardy perennial plants, continuing in bloom the whole season; color clear blue. Good for edging and rock gardens. Will bloom the first season if sown early. Height, 6 inches. ½-oz., 40c; ½-oz., 75c. Pkt.10c

**617 Carpatica Alba—The white-flowered form of the above. ½-oz., 40c; ½-oz., 75c. Pkt.10c

All 10c Packets are 3 Packets for 25c. The following Campanulas are all hardy perennials and will

All varieties marked with (**) are especially suitable for the Rock Garden.

CERASTIUM (Snow-in-Summer)

These blanketing hardy perennial plants are suitable for growing over stones and rough banks, also used on rough places in the rock garden or for edging of borders

"*0.23 Biebersteini—Dwarf creeping alpine plant. Does well in soil that is not too wet and in a sunny or half-shaded position. Protect against moisture in winter. Flowers white, foliage grey, forming a dense mat. 3 to 6 inches. June-July. 14-oz., 35c; 14-oz., 55c. Pkt.

CHEIRANTHUS

Very pretty dwarf hardy biennial plants, usually handled as annuals, flowering freely throughout the summer from seed sown in spring; for early spring flowering, sow in late summer. Splendid for rockery.

••625 Allioni (Siberian Wallflower)—About 12 inches high with heads of brilliant orange flowers. ¼-oz., 40c. Pkt. 10c

**626 Linifolium (Alpine Wallflower)—Forms a small compact plant about 12 inches tall with narrow leaves and innumerable spikes of small pure lavender blossoms throughout the entire summer. Thrives in a sunny situation in thin, gritty soil, requiring winter protection. 14-oz., 50c. Pkt.....10c

CHRYSANTHEMUM (Shasta Daisy)

627 The Prince—A Shasta Daisy producing very large pure white flowers, 5 inches in diameter, borne on long stiff stalks, 18 inches and more in length, of which the vigorous plant throws up a large number. Blooming takes place in about mid-season and it is no doubt the best variety for cutting yet produced. Pkt.15c Alaska-A splendid hardy perennial variety with flowers

Alaska—A spendid hardy perennial variety with lowers rarely less than 5 inches across, of the purest glistening white, with broad overlapping petals, and borne on long strong stems; a beautiful cut flower, remaining in good condition a week or more. 4-oz., 50c. Pkt.

ANNUAL VARIETIES

629 Bridal Robe (Double)—The plants grow about 12 inches high, and are covered the entire summer with their beautiful snow-white double flowers. Pkt....

COSMOS

Giant Flowered Cosmos—These produce enormous sized flowers, rich and varied colors and is one of the best strains for show Cosmos. Hardy annual. 632 Giant White—1/4-oz., 25c. Pkt..................10c 633 Giant Crimson—1/4-oz., 25c. Pkt.................10c 634 Pink Lady Lenox—A beautiful shade of shell pink, early blooming and very large flowers. 1/4-oz., 25c. Pkt...10c

Cosmos. Early Flowered—These attain a height of about 4 ft. and bloom very profusely. They are 4 to 6 weeks earlier than the Giant sorts or old-fashioned varieties. Flowers are not so large but as they bloom earlier are particularly adapted for late sowing or in northern latitudes where the season is short.

Early Flowered White—1/4-oz., 25c. Pkt......10c Early Flowered Crimson—1/4-oz., 25c. Pkt......10c 637 638 Early Flowered Pink-1/4-oz., 25c. Pkt......10c Early Flowered Mixed—1/4-oz., 20c. Pkt..........10c

DOUBLE COSMOS

These are of recent introduction, are becoming more popular each season. Excellent for cutting.

640	Pink Beauty-1/4-oz., 50c.	Pkt10c
641	Crimson King-1/4-oz., 50c.	Pkt10c
642	White Queen—1/4-oz., 50c.	Pkt10c
643	Superb Mixed—1/4-oz., 40c.	Pkt10c

CYNOGLOSSUM (Chinese Forget-me-not)

645 Amabile—An annual recently introduced from China; of

Collections of Flower Seeds-See page 55.

CLARKIA

This pretty and easily grown annual has been much improved in recent years, and the mixture offered below is now seen as cut flowers in most of the large cities of Europe; they do well either in sun or shade, growing 2 to 2½ feet high, with leafy racemes of double flowers, which all open in water when cut. 630 Elegans Double Mixed— 1/4-oz., 25c. Pkt.....10c

COLEUS (Flame Nettle)

A fine colored, tender perennial foliage plant for house or garden. Sow indoors in March.

631 Finest Mixed Colors. Pkt.....20c Columbine-See Aquilegia.

CYCLAMEN

644 Persicum Giganteum Mixed—One of the finest strains of large flowered English Cyclamen which comprises the best shades and colors varying through the various shades of white, pink, crimson and dark red. Greenhouse perennial.

DAHLIA

A popular autumn flowering plant which will bloom the first season from seed if started early. Dahlias are well known and hardly need description.

648 Cactus, Flowered—Collected from named varieties.
3 pkts., 50c. Pkt......20c 649 Decorative Flowered—Collected from named varieties. 3 pkts., 50c. Pkt......

Dahlia Roots-(See For Summer Flowering Bulbs).



Our Emerald Lawn Grass Seed Produces a Very Fine Lawn.

DELPHINIUM (Hardy Perennial Larkspur)

The Delphinium, or Hardy Larkspur, is one of the most valuable of all herbaceous plants. It provides many of the light and dark shades of blue colors greatly in demand, but very scarce. Many delightful shades of lavender and mauve are also present in the newest strains, all of which will be found in the choice varieties offered below.

Cultural Directions—Delphiniums thrive in rich, deeply cultivated soil; however, any soil, even hot and sandy, if well watered and fertilized, will give excellent results.

If the flowering spikes are cut after blooming to within 8 to 10 inches from the soil, fertilized and watered, fresh growth will then be produced, which will give blossoms. Coal ashes strewn over the crown will protect the plants from slugs through the winter and spring, also forming a natural drainage of excess moisture from the crowns.

Start seed in flats in February or March, transplant seedlings when about 1 inch high, to 4 inches apart. In May, set the plants out in the border, about 3 feet apart, where they will bloom in late summer. However, the seed can be sown at any time. The above is but one plan. Another successful method is to sow seed during July, August and September in a cold frame. When the plants are large enough to handle, transplant to 4 inches apart. When the ground has frozen hard, fill the frame with straw, cover with tar paper sash, and forget them until spring. In March, take off the tar paper sash and when the ground has thawed, remove the straw. Your plants are then ready to be moved to their permanent position.

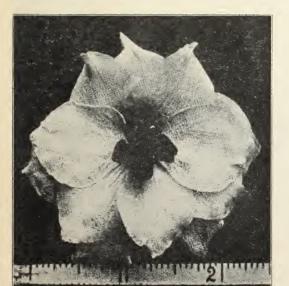
650 Blackmore & Langdon's Strain—We take great pride in offering this unusually fine mixture which contains nearly all of the newest varieties developed by these famous English Delphinium specialists. Many of their varieties have earned gold medal awards in England. The seed we offer is saved from their best varieties, including their novelties and imported direct from them by us. \(\frac{1}{12}\cdot \cdot \cdo

651 Wrexham Hybrids, Hollyhock Strain—A fine mixture of all shades, including shades of blue, lavender and mauve. Large flowers well placed on long pyramidal spikes. Their sturdy appearance reminds one of the Hollyhock—hence the name. 18-oz., \$1.00; ½-oz., \$1.85. Pkt.

NAMED VARIETIES ENGLISH DELPHINIUMS

A slight variation in colors must be expected in the flowers produced from seed, but a large per cent of the seedlings will come true. The others, too, will be of good type, and more than likely some new color combinations will be found among them.

659 Violet Robinson—This outstanding and very valuable variety fills a much-needed place in the large flowered semi-double type. In habit it greatly resembles Millicent



Individual Delphinium bloom, actual size, Hollyhock Strain



Delphinium Blackmore and Langdon's Strain

662 Lady Irene—A beautiful and graceful plant, which produces long cylindrical spikes of sky blue, semi-double flowers, with small black center. 6 feet. Pkt......50c

664 Howard H. Crane—The outer petals are a deep blue with mauve and blue inner petals and white eye. Makes a really grand spike. 5 feet, 6 inches. Pkt.....50c

All Delphiniums offered on this page, with the exception of varieties Bellamosum and Vanderbill Hybrids, have been imported from English and European growers. We feel certain that garden lovers will welcome this opportunity to obtain the best in Delphiniums.

DIANTHUS (Pinks)

Every garden should include some of the pinks because they are so easily grown and make such a wonderful display with their bright colored flowers. The plants are covered with sweet-scented flowers all during the summer. Grows about 1 foot high.

ANNUAL PINKS

- 668 Hedewiggi (Single Japan Pink)—A splendid mixture of single flowers of brilliant shades, brilliantly marked. Plants dwarf and very free flowering. ¼-oz., 25c. Pkt.......10c
- 669 Hedewiggi, Fl. Pl. (Double Japan Pink)—Very double with deep fringed petals. Colors vary from white to rose, lilac, carmine, crimson, scarlet, purple, brown and almost black, spotted and striped. ¼-oz., 40c. Pkt......10c

HARDY PERENNIAL PINKS

■■670 Allwoodi, Mixed—A splendid strain, being half carnation and half pink. 75 per cent come double. Pkt......35c

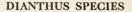
Barbatus-See Sweet William, page 52.

- ■■673 Plumarius (Pheasant's Eye Pink)—A semi-double hardy variety, clove-scented. Flowers blush-white shaded with deep crimson and maroon. ¼-oz., 25c. Pkt........10c

DIDISCUS (Blue Lace Flower)

This valuable flower deserves large cultivation for florist use. Flowers in clusters, borne on long, stout stems. General appearance not unlike lace and is often referred to as "Lace Plant". Plants about 18 inches high. Annual.

683 Coeruleus—Light Blue. 1/4-oz., 50c. Pkt..........10c



These well-known mountain plants are for the sunny border or sunny, exposed places in the rock garden or rock wall. They flower generally after the spring flowers are over and some are very fragrant. While having all the outward characteristics of high alpine plants, the varieties we list are as friendly and easily grown as Arabis or Alyssum. Hardy perennials.

Culture—Easily raised from seed, germinating quickly. Plant in ordinary good soil, which contains some lime and which should be well drained.

- ••675 Caesius (Cheddar Pink)—Pleasing to the eye at all seasons with its tufts of grey, narrow leaves and rose-pink, fringed, spice-scented blossoms. Good for a south wall, or any dry, hot place on the rock garden. Will vary from 5 to 10 inches high. Late May to early July. Pkt...........10c
- ••677 Deltoides (Maiden Pink)—A trim sturdy dwarf plant.
 Deep pink, crimson-centered flowers borne in abundance.
 Foliage forms a dense carpet. Easily grown on the rockery.
 Requires sunny position. 6 to 9 inches high. May-June. Pkt. 10c
- ••679 Deltoides, Major Stern's Variety—Flowers bright crimson, with dark foliage, free-flowering. Pkt...........15c
- ••681 Knappi—A unique species, producing on slender stems clusters of small yellow blossoms. Place it high in the rock garden, as it loves a dry, sunny place. Pkt...........25c

DIGITALIS (Foxglove)

684 Shirley Strain—A strain of giant Foxglove raised by the late Rev. W. Wilks. The plants attain a height of 5 to 7 feet, with spikes 3 to 4 feet long carrying flowers of giant size, ranging in color from white to dark rose and handsomely blotched and spotted cream, maroon and chocolate. A very fine, hardy perennial border plant. \(\frac{1}{2}\cdot - \text{Oz.} \), 40c. Pkt. 15c

Gloxiniaeflora—This is a fine strain of the ordinary Foxglove D. purpurea, with handsome spotted Gloxinia-like flowers on long spikes.

- 685 White—1/8-oz., 25c. Pkt.....10c
- 686 Purple—1/8-oz., 25c. Pkt....10c
- 687 Rose—1/8-oz., 25c. Pkt.....10c
- 688 Mixed-1/8-oz., 25c. Pkt.....10c

DIMORPHOTHECA (South African Daisy)

A hardy annual that flowers early and keeps on blooming

- 689 Aurantiaca-Golden-orange, with dark center. Pkt....10c
- 690 Salmon Beauty—A large-flowering African Daisy of a pleasing true salmon shade, a welcome color addition to this popular flower group. ½-oz., 40c. Pkt..................10c



Dianthus Highland Queen

We are gradually extending our list of Rock and Alpine Seeds

EDELWEISS (Leontopodium)

ERIGERON

ESCHSCHOLTZIA (California Poppy)

Very attractive hardy annuals growing about 1 foot high which bear large single flowers on fairly long stems which are excellent for cutting. They bloom over a long season and a bed in full flower is very gorgeous. Foliage is finely cut, has bluish tinge of bloom, delicate and attractive. Flowers are more or less saucer shape, various shades of yellow, orange and orange-crimson.

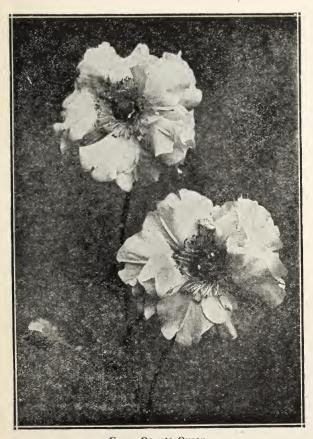
- 693 Scarlet Beauty-Deep scarlet. 1/4-oz., 35c. Pkt....10c
- 694 Golden West—A very large, bright yellow sort with deep orange at the base of petals. Oz., 30c. Pkt.......10c
- 695 Mixed—An excellent mixture, including yellows, creamywhite, scarlet, orange and crimson shades. Oz., 30c. Pkt...10c

EUPHORBIA

Hardy annual growing about 2 feet high.

696 Variegata (Snow on the Mountain)—Leaves veined and margined with white. 1/4-oz., 25c. Pkt...........10c

FEVERFEW (Matricaria)



Geum Orange Queen

FOUR O'CLOCK (Marvel of Peru)

Old-fashioned flowers which are borne on erect, bushy plants, 2 to 3 feet high. Flowers are large tube-shaped, opening in the afternoon and remaining open all night, and close again in the morning. Very desirable for borders and back-grounds for lower growing plants. Hardy annual.

698 Mixed—Comprises all shades. Oz., 25c. Pkt10c

Forget-Me-Not-See Myosotis.

Foxglove-See Digitalis.

GAILLARDIA (Blanket Flower)

The Gaillardias are wonderful for cut flowers, blooming right through until frost, and adapt themselves to almost any kind of

- 699 Indian Chief—An exceptionally rich colored variety, having a dark brown center, the petals a glittering metallic bronzy-red. Hardy annual. ¼-oz., 30c. Pkt..........15c

GENTIANA (Blue Gentian)

Beautiful Alpine perennials admirably suited for the border and rock gardens.

Culture—Gentians are slow to establish themselves, requiring special care to grow them successfully. Should be grown in a rich moist loam containing a fair amount of well-decayed cattle manure. It is advisable in all cases to mix peat or leaf mold freely

with the soil before planting. Top dress with well-rotted manure in the spring. The plants should be well supplied with moisture in dry weather. Gentians do not like to be disturbed once they are established.

GERANIUM (Pelargonium)

The heads of gorgeous flowers, of many shades of color, borne continuously, render this one of the most popular plants grown, either for pot culture in winter or for bedding out in summer. Tender perennial.

705 Single Large Flowering-Mixed. Pkt......10c

GERBERA (Transvaal Daisy)

GEUM (Avens)

Geums have become indispensable border plants. The sorts named below bloom from early summer till late autumn, and the flowers, both for their purity of color and graceful poise, are much prized for cutting. Hardy perennial.

- 709 Geum Orange Queen—This very fine new variety of a shade intermediate between that of Mrs. Bradshaw and Lady Stratheden, a bright orange-scarlet, has been in large demand during the past season. Pkt.

GILIA

710 Capitata—This is a very graceful annual, growing about 2 feet high with fine feathery foliage and bearing freely over a long season, globular heads, about 1 inch across, of rich lavenderblue flowers, which last well when cut. ½-oz., 25c. Pkt....10c

GODETIA

GYPSOPHILA (Baby's Breath)

Pretty free-flowering plants, succeeding in any garden soil Their misty white panicles of bloom are largely used for mixing with other cut flowers.

- 712 Elegans Alba (True Covent Garden Strain)—This is an improved large flowering, pure white form of the annual Baby's Breath. Half-hardy annual. Oz., 30c. Pkt.....10c
- 713 Elegans Delicate Pink—A pretty blush-pink form of the above and equally as valuable for cutting. Oz., 40c. Pkt...10c

- 716 Paniculata Double—Pure white, giving a very large percentage of double flowers. Hardy perennial. Pkt......20c
- ■717 Repens—A pretty dwarf trailing species for the rockery. It has pinkish-white flowers and is a continuous bloomer. Hardy perennial. ⅓-oz., 60c. Pkt......10c
- ■718 Repens Rosea—A pale pink form of the above variety, both lovely in the rock garden or in the dry wall. Pkt.....10c

HELIANTHEMUM (Rock or Sun Rose)

Low growing, shrubby evergreen perennial plants, loving sunshine and dry, exposed positions. Easily raised from seed, but should be sown right out in the open where they are to bloom, or grown in pots and then set out.

HELICHRYSUM (Straw Flower)

A hardy annual of the easiest culture; one of our best "Everlasting" flowers the dried double bloom being very handsome in winter bouquets. 2 feet.

HELIOTROPE

722 Large Flowered Hybrids—A mammoth flowering variety having enormous quantities of flowers and trusses sometimes measuring 10 to 12 inches across. Very fragrant. Colors vary from pure white through the various shades of blue and purple to indigo. 2 pkts., 25c. Pkt........15c

HEUCHERA (Coral Bells)

A very graceful hardy perennial for rockeries and borders. Foliage pale green, dwarf and compact, above which rise numerous panicles of flowers which are excellent for cutting. Easily grown from seed.

- ••723 Sanguinea—Flowers bright coral red, very free-flowering, grows well in either sun or half shade. 12 to 18 inches. June to September. Pkt.....25c

HIBISCUS (Rose Mallow or Marshmallow)

HOLLYHOCK

- 726 Exquisite—Flowers very large, beautifully fringed with curled petals, extremely double. Each white-margined petal is adorned by a large blotch, suggesting the markings of the Pelargonium. Supplied in mixture only, containing following colors: Rose, light rose, carmine-rose, violet and dark purple.

- 729 Double Scarlet-Very brilliant. 1/4-oz., 75c. Pkt....10c
- 730 Double Yellow—A bright lemon color. ¼-oz., 75c.
- 731 Double Mixed—Comprises all shades. 1/4-oz., 50c.
- 733 Single Hollyhocks—Mixed. ¼-oz., 25c. Pkt.....10c Ice Plant—See page 55.



Hollyhock

IBERIS (Hardy Candytuft)

Low, evergreen, shrubby perennial plants which are very valuable for dry sunny places, that are well drained. The plants should be clipped over after flowering, in order to keep them compact and sightly. Easily raised from seed.

KOCHIA—Trichophylla (Mexican Fire Bush) (Also called Burning Bush and Summer Cypress)

737 A quick growing foliage or hedge plant which forms symmetrical globe-shaped plants about 3 feet high. The foliage is cypress-like in appearance being finely cut, clear green color. Early in the fall it is covered with innumerable little flowers which cause the plant to take on a reddish tinge—hence, the name Fire Bush. Seed can be started early indoors and transplanted, or sown in open border and transplanted or thinned out. Annual. Oz., 35c. Pkt. 10c

LANTANA

Half-hardy greenhouse or bedding plants, constantly in bloom, bearing miniature, verbena-like heads of orange, white and rose. Start seed indoors early.

GIANT IMPERIAL LARKSPUR

A new type of Annual Larkspur, developed in California. These Larkspurs are ideal for cut flowers, as the flower stems, three to four feet long-branch from the base of the plant. (See illustration.)

739 Blue Spire—Intense deep Oxford blue. 1/2-oz., 40c. Pkt.....15c

LATHYRUS LATIFOLIUS

746 White Spire—A dazzling pure white. ½-oz., 40c. Pkt......15c
747 Imperial Mixture—A mixture of the above named varieties. ½-oz.

(Everlasting, or Hardy Sweet Pea)

LAVENDER (Lavandula Vera)

LIATRIS (Blazing Star)

LILIUM REGALE

751 The Regal Lily—It is absolutely hardy and is excellent for forcing. The flowers are white, slightly suffused with pink, with a beautiful shade of canary-yellow at the center, and extending part way up the trumpet. It is delightfully perfumed, reminding one of the jasmine, and lacking the heavy, oppressive odor of most lilies. Blooms out-of-doors early in July, and seedling bulbs will flower the second year. Lift the bulblets in fall and replant to greater depth in their permanent location. Pkt........................15c

LINUM (Flax)

LOBELIA

LUPINUS (Polyphyllus)

Most beautiful hardy border plants producing tufts of soft green foliage, from which arise in continuous succession the stately spikes of bloom. Do not disturb plants after they are once established. June-September.

LUPINUS (Annual)

LYCHNIS

A fine old-fashioned flower, bearing large heads of brilliantly colored flowers, that liven up the border during summer and early autumn. Hardy perennial.

760 Viscaria Splendens-Brilliant red. 1/4-oz., 25c. Pkt.10c



Giant Imperial Larkspur

MARIGOLD

A very popular old-fashioned garden annual which is remarkable for its brilliant display of yellow and orange flowers which are borne in greatest profusion from early summer till frost. The African varieties are tall, usually 2 to 3 ft. high and well adapted for large beds, back-grounds or mixed borders. The French are more dwarf and can be used for borders and bedding. All varieties have finely cut, bright green foliage.

AFRICAN VARIETIES

761 Guinea	Gold	(New)—For	complete	description,	see
Novelty page	32. PI	ετ			25c
M/O Y	4 44 Y		-		

- 762 Lemon All Double (New)—For complete description, see Novelty page 32. Pkt......25c
- 764 Prince of Orange—Flowers about 3 inches in diameter, imbricated and extremely double, in tints of primrose, orange and gold. Grows 2 to 3 ft. high. 1/4-oz., 25c. Pkt......10c
- 766 African Double Mixed—Comprises various shades and well adapted for large beds or mixed borders. 14-oz., 20c. Pkt..10c

FRENCH VARIETIES

- 768 Legion of Honor (Little Brownie)—A single flowering Marigold, forming compact bushes 9 inches high. Begins flowering early, commencing in June, continuing until frost. The flowers are golden-yellow, marked with a large spot of velvety crimson at the base of each petal. 1/4-oz., 25c. Pkt..10c

MECONOPSIS

769 Baileyi-For description, see Novelty page 33. Pkt...50c



African Marigold

MIGNONETTE (Reseda)

A popular hardy annual producing dense, cone-shaped spikes made up of thickly set flowers, yellow, orange, red, etc.

Morning Glory-See page 55.

Moon Vine-See page 55.

MYOSOTIS (Forget-Me-Not)

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Perennials and hardy if given slight protection through the winter. Seed may be sown any time from spring till mid-summer. The Alpestris variety comes into bloom in April, and are largely used for bedding or borders in connection with spring flowering bulbs, Pansies, etc. The Palustris sorts do not bloom till May, but continue till fall.

- 772 Alpestris Rose—This is a lovely shade of bright rose—a rather unusual color. ½-oz., 25c. Pkt.............................10c
- 773 Dissitiflora—Large-flowered early strain. The most valuable to form a groundwork for spring bulbs. Deep blue. Height, 9 inches. Biennial. ½-oz., 65c. Pkt........15c

NASTURTIUM

One of the most popular of tender annuals which is valuable alike for bedding, borders and cutting. Few plants are more easily grown or remain longer in bloom. Flowers are in many brilliant shades ranging from creamy-white through rose, light pink and scarlet together with yellow, orange, brown, maroon, etc., and many flowers are brilliantly spotted. Blooms abundantly from early summer until late fall.

Seed is usually sown outdoors as soon as the weather is settled. If desired can be started in the house and transplanted.

NEW DOUBLE SWEET-SCENTED NASTURTIUM

DWARF VARIETIES

TALL VARIETIES

These are excellent for growing in beds and borders where there is plenty of room for trailing or for light trellises and for hanging baskets, vases and window boxes. Height, usually 4 to 5 ft.

777 Tall Mixed—Comprises all shades in splendid mixture.
Oz., 20c; ¼-1b., 50c; 1b., \$1.50. Pkt...............................10c

NICOTIANA

(Sweet-Scented Tobacco Plant)

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia blossom, but with a longer tube. The flowers open toward evening and emit a powerful perfume.

- 779 Sanderae Hybrids—A showy and profuse flowering, half-hardy annual, giving a continuous display of brilliant flowers through summer and autumn. The plant is of branching, bushy habit, 2 to 3 feet high, and carries the flowers in clusters. The flowers measure from 1 to 2 inches across and remain open all day. Many colors, mixed. ½-oz., 25c. Pkt.......10c

Please Note New English Majestic Snapdragons, Page 36.

NIGELLA

(Love in a Mist, or Devil in the Bush)

OENOTHERA (Evening Primrose)

The Oenotheras are chiefly used in the rockery and border. All require a well drained light soil intermixed with well-decayed manure. They are apt to perish in winter if grown in heavy, damp soils.

PANSIES

This popular annual is so well known that it needs little description. Pansies are easily grown and bloom profusely for many months. Sow the seed indoors early in March or outdoors as early as the ground can be prepared. If sown during August, and wintered over in a cold frame, the plants will begin blooming very early the following spring, and continue their showy display throughout the summer.

783 "Our" Fancy Mixture—A particularly fine strain comprising all the best shades and brilliantly marked. It is one of the most effective and largest flowered sorts and the flowers are of good substance on stiff stems. Plants are thrifty and extremely free flowering. When properly grown it is of faultless form and wonderfully large. ½-0z., \$1.00, ½-0z., \$1.75. Pkt...25c

GIANT EARLY-FLOWERING PANSIES

This remarkable new race of Pansies flowers four to six weeks earlier than the other varieties. The flowers are of immense size, on long stems. Excellent for greenhouse culture or early spring bedding.

786 Superb Mixed—1/8-oz., 30c; 1/4-oz., 50c. Pkt......15c

Our Pansies are giant strains from the best European growers.

Tufted Pansies-See Viola, page 53.

PENTSTEMON (Beard Tongue)

A beautiful perennial plant producing freely large spikes of handsome tubular flowers in almost every shade and color.

787 Gloxinioides "Sensation"—As a bedding plant this takes rank with the Petunia, Phlox, etc. It grows about 30 inches high, every branch being a spike of large, Gloxinia-like flowers in a very wide range of bright colors, including rose, red, carmine, cherry, pink, lilac, purple, etc. 2 pkts., 25c. Pkt., 15c

PHYSALIS (Chinese Lantern Plant)

788 Francheti—An ornamental plant, forming dense bushes about 2 ft. high, producing freely its bright orange-scarlet lantern-like fruits, which can be cut and dried for winter bouquets; highly interesting. Perennial. Pkt......10c

PHYSOSTEGIA (False Dragon Head)

One of the prettiest hardy perennials, and gaining in popularity as it becomes better known. It forms dense bushes, 3 to 4 ft. high, bearing freely during the summer months spikes of delicate rosy lilac or white tubular flowers not unlike a gigantic heather.

789 Virginica—Rosy-lilac. 1/8-oz., 50c. Pkt............ 10c

PLATYCODON

(Balloon Flower, or Japanese Bellflower)

One of the best hardy perennials, producing very showy flowers during the whole season. They form large clumps and are excellent for planting in permanent borders or among shrubbery; easily raised from seed, which begins blooming in August if sown outdoors in April.

790 Blue—½-oz., 40. Pkt......10c

PHLOX DRUMMONDI—Grandiflora

Hardy annuals growing about 2 ft. high, producing the largest size blooms in brilliant display and range of colors.

Seed can be sown out of doors where they are to bloom, thinning out as may be necessary or they can be started in boxes and transplanted if desired.

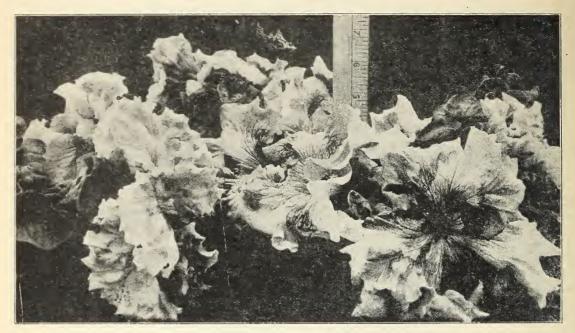
791	Alba—Pure white. 1/4-oz., 40c. Pkt
792	Brilliant—Bright rose. 1/4-oz., 40c. Pkt 10c
793	Coccinea—Fiery scarlet. ¼-oz., 40c. Pkt10c
794	Primrose—Buff-yellow. 1/4-oz., 40c. Pkt10c
795	Violet—With white eyc. 1/4-oz., 40c. Pkt 10c
large	Grandiflora Mixed—An extra choice strain of the best flowered varieties, unexcelled in profusion and brilliancy oom and color. 1/4-0z., 30c. Pkt10c
	Cuspidata Mixed (Star Phlox)—Star-shaped flowers laciniated petals. ¼-oz., 40c. Pkt10c

PHLOX PERENNIAL



"OUR" Fancy Mixture (About one-third natural size)

All 10c Packets are 3 Packets for 25c.



PETUNIA DWARF GIANTS OF CALIFORNIA

PETUNIA

A very useful and free-flowering annual, thriving on any soil and in the hottest weather. For a showy bed, or for porch or window boxes, few plants equal the Petunia in effectiveness.

For earliest blooming outdoors, seed is started in shallow boxes and shifted to pots, then transplanted to beds. Or seed may be sown in open border where they are to bloom, thinning out as necessary or transplanting, usually allowing about 1 ft. to 18 inches between plants.

- 800 Dwarf Giants of California—Flowers very large, in great variety of colors and markings, with deep yellow throats.
- 801 Double Fringed Mixed—Many brilliant colors; flowers beautifully fringed. Pkt......35c
- 803 Pink Glory—Large well-formed flowers of a most exquisite luminous pink, shaded with a contrasting white throat, and marked with creamy white veins. Pkt.........25c
- 804 Rose of Heaven—This would be our choice if the space available permitted the planting of only one variety of Petunia. It excels by its marvelous color—a brilliant crimson-rose of rare purity. 15-0z., 40c; 16-0z., 65c. Pkt............15c
- 805 Rosy Morn—Soft carmine-pink with white throat; makes a very dainty and at the same time effective border. 4-oz., 75c. Pkt. 10c.

BALCONY PETUNIAS

A splendid large and free flowering type for window boxes, vases, hanging baskets, etc., the flowers average 3 inches across and make a very effective display over a long season.

- 812 Balcony Crimson—Rich velvety crimson. 1-oz., 50c. 2 pkts., 25c. Pkt. 15c
 - Finest Mixture-14-oz., 50c. 2 pkts., 25c. Pkt....15c

PORTULACA (Moss Rose)

These are excellent for bedding, vases, rockeries or window-boxes, producing a dazzling display of colors. Single varieties have cup-shaped flowers about 1 inch across, range through many shades of white, pink, yellow, orange, red and some are striped. The double varieties have narrow petals which are set closely and form full heads. Stems and leaves are succulent, creeping and ornamental. They will stand a great amount of drought and bloom through a long season. Height about 9 inches. Hardy annual.

PYRETHRUM (Painted Daisy)

POTENTILLA

A hardy perennial trailing plant which covers the ground rapidly, sending out many roots. Potentillas resemble the strawberry plant, especially in the manner of growth and the foliage.

**816 Nepalensis Miss Willmott—Flowers salmon-pink, very freely produced. 1/4-oz., 35c. Pkt......10c

All 10c Packets are 3 Packets for 25c.

POPPIES

Well-known and popular annuals and perennials which produce flowers varying from moderate sized single cup-shape blooms to very much larger flowers sometimes 4 inches across both single and double. Colors are extremely vivid and brilliant; very graceful, hence, fine for cutting and for home decoration. Grown in beds and masses nothing is more brilliant in the garden and they are of

ANNUAL VARIETIES

818 American Legion-A greatly improved E	
or Flanders Poppy, with very large flowers of da	zzling orange
scarlet. 2 ft. Oz., 40c. Pkt	10c

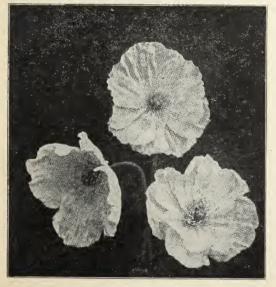
- Shirley--A beautiful sort which blooms a long season and
- Tulip-One of the most brilliant of poppies, bearing bright
- 822 Peony Flowered Mixed—Very large, double poppies with somewhat broader petals in many pleasing shades. Height, about 2 ft. Oz., 40c. Pkt....

PERENNIAL POPPIES

Sow the seeds thinly right where the plants are to grow.

ORIENTAL POPPIES (Papaver Orientale)

- 823 The Feltham—For complete description, see Novelty page 33. Pkt.....
- 824 Orientale, Mrs. Perry-Orange apricot, very fine. Pkt. . 25c
- 825 Orientale, Perry's White—The flowers are a fine satiny white with a crimson-maroon blotch at the base of each petal. Pkt.....
- 826 Princess Victoria Louise—Rich salmon-pink. Pkt....25c
- 828 Orientale Hybrids Mixed—¼-oz., 50c. Pkt......10c



Iceland Poppy-Coonara Pink

ICELAND POPPIES (Papaver Nudicaule)

829 El Monte—For complete description, see Novelty page 33. Pkt..... =830 Coonara Pink—This new Ice and Poppy adds an exceptionally lovely color to this class, a rose-pink suffused with salmon-pink. If sown in the hotbed in March or April, plants will bloom the same year. Pkt. 25c 831 Sunbeam-A great improvement on the ordinary mixed.

The stems are longer and the flowers larger. 2 pkts., 25c. Pkt. 15c

PRIMULA (Primrose)

The charming and beautiful Chinese Fringed Primroses, the Obconica varieties and the Malacoides or Baby Primroses are among the most important winter-blooming pot plants. The seed we offer so of the highest quality and has been saved from the best strains in England. Seed sown in April will bloom during early winter; August for spring blooming. Sow in shallow pans, in soil consisting of part sand and humus or leaf mold worked through a fine sieve and allow for good drainage. Greenhouse perennial.

PRIMULA SINENSIS (Chinese Primrose)

PRIMULA OBCONICA

833 Gigantea Mixed—Splendid range of colors; flowers, very large, growth vigorous. Pkt.....

PRIMULA MALACOIDES (Giant Baby Primrose)

Primula Malacoides should not be sown as early as Primula Sinensis or Primula Obconica, but should be started about June for blooming in early winter.

334 Snow Queen (New)—Extremely floriferous, being a vast improvement on the Primula Malacoides Alba hitherto grown, the florgers being much larger and of the purest white. The the flowers being much larger and of the purest white. The delicate beauty of Snow Queen renders it a splendid subject for conservatory decoration. Pkt. 835 Malicoides Fimbriata-Lovely pink flowers, delicately fringed. Pkt...

PRIMULA (Hardy Primrose)

The Primrose is a splendid plant for naturalizing near shrubs or shaded nooks and moist places on the rockery. Primroses are not at home in the open herbaceous borders, but thrive in sheltered, lightly wooded places, where they may grow among the Violets, Hepaticas and Bloodroot. They generally establish themselves in damp and shaded positions which are generally most difficult to fill. Perennial.

**836 Auricula Alpina—The growth is very attractive, forming in a rosette, broad thick foliage. The flower stalks rise to a height of 6 to 8 inches, bearing heads of bloom of various colors; exceedingly fragrant. Will grow in sun or half shade. Protect in winter. In flower during late April and May. Pkt. 15c **837 Cashmeriana—Large purplish-blue flowers in globe-shaped clusters. Foliage beautiful. Thrives in moist loam having good drainage; prefers a half-shaded situation. Blooms early. 8 to 12 inches high. Pkt.

■838 Cortusoides—Broad soft foliage in a resette close to the ground. Flowers in early summer, deep rose; prefere light, rich, well-drained soil, in a half-shaded position in the border or rockery. 6 to 10 inches high. Pkt.

Florindae-For complete description, see Novelty page

POLYANTHUS (Bunch Primrose)

Showy, free-flowering perennials that should be used largely in borders, wild gardens and rockeries. If your soil is light and dry and you have no shaded situations, do not try to grow the true Primroses as offered above, but confine your efforts to the Polyanthus that we list below. The Polyanthus or Bunch Primrose will thrive in full sun if they have some moisture at the root; if not they must be given the comfort of partial shade. not, they must be given the comfort of partial shade.

**841 Giant Crimson—Extra fine. Pkt..... BB842 Giant White-Pure white flowers of giant size. Pkt..35c

mm844 Gold Laced—Each petal laced with gold. Pkt....35c

Blue Flowered—Rich pure blue. Pkt......50c *******845 **==846** ■■846 Giant Flowering Mixed—A splendid mixture of colors offered above. Pkt.....

Our Primroses are pure strains from the best English growers.

RICINUS (Castor Bean)

849 Zanzibariensis—Grows to immense size. Leaves sometimes measure 30 inches across and range in color from bright green to deep bronze. Choice mixed colors. Oz., 25c. Pkt. 10c

SALPIGLOSSIS (Painted Tongue)

A very showy, half-hardy annual which is desirable both for bedding or border plants. Has richly colored funnel-shaped flowers of many shades including yellow, buff, crimson and scarlet and extends through to purple and almost black.

The strains we offer are all of the large-flowering type and contain wonderful colors and markings. Height, 2 to 2½ feet.

851	Primrose—Pkt10c
852	Velvety Red—Pkt10c
853	Rose and Gold—Pkt10c
854	Scarlet and Gold—Pkt10c
855	Velvety Violet—Pkt10c
856	Violet and Gold—Pkt10c
857	Collection of one packet each of the above 6 colors45c
858	Grandiflora Mixed—All colors, 1/4-oz., 40c. Pkt 10c

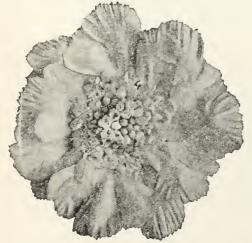
SALVIA (Scarlet Sage)

One of the most useful and effective bedding plants which produces immense masses of brilliant turkey-red flowers from early in the season, continuing in uninterrupted succession until frost. Blooms are borne on long spikes well above the foliage and continue in good condition a long time. Spikes are often 8 to 10 inches long and have 30 to 40 tube-like flowers borne in a feathery manner on each side of the stem.

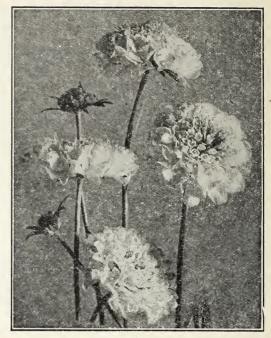
Seed should be started in boxes, hot beds or greenhouse, transplanted and set out of doors after the weather has become warm. Blooming the first season.

860 America or Globe of Fire—This is the freest and most continuous blooming of all the Scarlet Sages, also the most uniform in habit of growth, which makes it particularly valuable for bedding or planting in lines. Annual. 16-02.75c; 2 pkts...15c.

SAPONARIA (Rock Soapwort)



Scabiosa-Isaac House Strain



Scabiosa

SCABIOSA (Pin Cushion Flower, Mourning Bride)

One of the old-fashioned popular annuals which produce an abundance of many colored flowers which are excellent for cutting. The blossoms are borne on long stems, are fragrant, double and somewhat in the shape of a pin cushion. It makes an effective garden plant for bedding or borders.

Seed can be sown in open border and thinned out from 1 to $1\frac{1}{2}$ ft. apart. Grows 2 to $2\frac{1}{2}$ ft. high.

PERENNIAL SCABIOSA

All 10c Packets are 3 Packets for 25c.

SAXIFRAGA (Rockfoil)

Saxifrages thrive in a deep gritty loam and sunshine. Sow the seed upon the surface of a pot or flat of very fine sandy soil, not covering it at all. Cover with paper or boards to insure darkness and to check the evaporation of moisture. Perennial.

SCHIZANTHUS

(Butterfly Flower or Poor Man's Orchid)

An attractive hardy annual growing about 20 inches high, which is of neat, compact growth with finely cut foliage. The plant bears very attractive flowers ranging in colors from white to purple and are shaded from their edges to throats with darker colors. Flowers resemble somewhat the butterfly and are borne in clusters or spikes. Seed can be sown outdoors after danger of frost or started earlier indoors and transplanted.

EARLY GIANT IMPERIAL STOCKS (Cut and Come Again)

A recently developed strain of early-flowering Winter or Brompton Stocks, forming much-branched plants about 2½ ft. high and having numerous spikes of very large, double, delightfully fragrant flowers, they are of special value as pot plants for greenhouse decorations and for cutting during the dull winter months; for this purpose seed should be sown from July to September; if sown in February or March will produce plants that will bloom out-of-doors from mid-summer till frost. Annual.

877 Apple Blossom—Blush pink. 4-02., 50c. Pkt.....20c

0	Tippie Dicocount Dicker pinks 16 obs, cocs I messississe
878	Chamois—Ivory tinted old rose. 16-oz., 50c. Pkt20c
879	Fiery Blood Red—Striking. 16-oz., 50c. Pkt20c
880	Rose—Deep rose pink. 16-oz., 50c. Pkt20c
881	White—Pure White. 16-oz., 50c. Pkt20c
882	Golden Ball—Canary yellow. 16-oz., 50c. Pkt20c
883	Violet—Soft violet purple. 16-oz., 50c. Pkt20c
884	Superb—Mixed. 16-oz., 50c. Pkt20c



Spencer Sweet Peas

SWEET PEAS

Sweet Peas are among the seeds to be sown very early in the spring. They should go into the ground as soon as the soil can be worked, and should be planted six inches deep, being covered at first with only two inches of soil, the trench being filled as the plants grow. One ounce sows 35 to 40 feet in a row. It is best to soak the seeds for several hours before they are planted. If this plan of planting early is followed, and if the Sweet Peas are kept mulched with peat moss or with lawn clippings or else watered abundantly, they will generally give a fine crop of blooms.

EARLY FLOWERING SPENCER VARIETIES

While these are especially adapted for forcing under glass for winter and early spring blooming, they are also valuable for outdoor culture, coming into bloom five or six weeks earlier than the regular Spencer type, and if the flowers are kept cut, they will continue to bloom for a long time.

- 885 Aviator-Dazzling crimson-scarlet.
- 886 Ball Rose-Rose-pink.
- 887 Blue Bird-A splendid rich, deep blue.
- 888 Burpee's Orange-Deep orange.
- 889 Giant Rose-Rose-pink, very large.
- 890 Harmony-Clear lavender.
- 891 Mrs. Kerr-A fine shade of salmon.
- 892 Rose Queen-Light rose-pink.
- 893 White Harmony-Pure white, long stems.
- Price—Any of the above. Oz., 60c; 1/4-1b., \$1.75. Pkt......10c
- 894 Early Flowering Mixed—A splendid mixture containing all colors. Oz., 50; ¼-1b., \$1.50. Pkt 10c

SUMMER FLOWERING SPENCER SWEET PEAS

- 896 Ruffled Mixed—We are offering this year for the first time a mixture of the Ruffled Type. It includes a wide range of beautiful colors. The blooms are large and beautifully frilled and ruffled. ½-oz., 40c; oz., 70; 4 ozs., \$2.25. Pkt
- 897 Pinkie—A recent introduction which is by comparison the largest of all we have ever seen of the deep pink varieties. A most vigorous grower, producing on long stout stems well waved, nicely placed flowers of beautiful rose-pink shade. Pkt.
- 898 Heavenly Blue-Delphinium blue.
- 899 Hercules-Giant pure pink.
- 900 Jack Cornwell, V. C .- Dark blue.
- 901 King Edward Spencer—The large flowers are waved and crinkled; standard and wings deep rich carmine-scarlet.
- 902 King White-Giant white.
- 903 Mary Pickford-Cream-pink suffused with salmon.
- 905 MC Best Spencer Mixed—Comprises the best varieties in all beautiful shades and colors and much superior to that offered indiscriminately as coming from growers.

 Oz., 15c; ½-1b., 50c; 1 lb., \$1.50. Pkt..........10c

The varieties marked with •• throughout the list of flower seeds are especially suitable for the Rockery or Rock Wall. Also see page 34.

STOKESIA (Cornflower Aster)

907 Cyanea—This is not new, but is a rare and beautiful hardy perennial. The plant grows about 24 inches high, each bearing from 20 to 30 handsome lavender-blue cornflower-like blossoms; in bloom from July till frost. One of the choicest subjects for the hardy border and indispensable for cutting.

SUNFLOWER (Helianthus)

Hardy Annual

Of easy culture, and the newer sorts are among the most ornamental and effective of all garden annuals. The single flowering sorts are indispensable for cutting. Bloom early and continue until frost.

- 909 Red—The flowers are of a chestnut-red color, which appears as a ribbon around the center, while the points of the petals are tipped yellow. Grows to a height of 6 feet. 2 pkts., 25c. Pkt. . . . 15c

SWEET ROCKET (Hesperis)

Old-fashioned garden plants; growing about 3 feet high, bearing spikes of showy fragrant flowers. Excellent for naturalizing among shrubbery or for planting in a permanent border. Hardy perennial.

SWEET WILLIAM (Dianthus Barbatus)

A well-known, old-fashioned perennial which has long been used for beds and borders. It is one of the most desirable plants in the garden, is easily grown, very hardy and free flowering, continuing in bloom for several weeks. The flowers are borne in heads or clusters, sweet scented, in brilliant colors ranging from pure white through pink, crimson, etc., to deep purple. Most of them have two colors in the same flower. They are borne on stiff stems in graceful profusion and the clusters are often 3 to 4 inches across. Useful for cutting. Height, 1½ ft.

- 913 Newport Pink—A distinct new color which originated in one of the far-famed gardens at Newport, R. I. In color it is what florists call watermelon-pink or salmony-rose. Strikingly brilliant and beautiful; the flowers are borne in massive heads on stems 18 inches high. For mid-season mass bedding it has no equal. It is also very effective for cutting. 1/4-oz., 50c. Pkt.10c
- 914 Holborn Glory—This strain is a large-flowered selection of the auricula-eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, while the range of color, all showing a clear, white eye is truly superb. 4-oz., 30c. Pkt.....10
- 915 Scarlet Beauty-Intense scarlet. 1/4-0z., 40c. Pkt...10c
- 916 Double Mixed—A splendid strain of this beautiful perennial comprising a great variety of excellent shades. Pkt.10c

THALICTRUM (Meadow Rue)

Handsome dark foliage resembling the Columbine. The flowers are borne in feathery clusters. Very useful in making bouquets. Its light and graceful habit makes it very valuable in the perennial border or when placed among the shrubbery.

- 918 Dipterocarpum—A handsome herbaceous plant, with loose sprays of clear rosy-purple with lemon-yellow stamens and anthers. The plant is of strong growth, about 4 to 5 feet high. The flowers are produced during August and September. Thrives best in a poor soil in a sunny position. Pkt......15c

Eight New Majestic Snapdragons—See Antirrhinum, page 36.

TRITOMA

(Red-hot Poker, or Torch Lily)

TROLLIUS (Globe Flower)

920 Mixed Varieties—Saved from a collection of the newest varieties, ranging in color from pale yellow to deep orange; on strong stems 2 feet high. Hardy perennial. Grows best in a half shaded moist situation. May and June. Pkt..........................15c

TUNICA (Coat Flower)

URSINIA

VALERIANA (Garden Heliotrope)

Showy hardy perennial; forms small flowers in dense clusters. Very fragrant.

VERBASCUM (Mullein)

- 925 Phoenicium Hybrids—A hardy perennial with spikes of white, pink, purple, mauve and blue flowers. Unusually attractive for cutting and as a showy plant in the hardy border. Will bloom from June to September. Height, 2 feet. Pkt...10c



Sweet William (Holborn Glory)

Try our Blackmore & Langdons Delphiniums, you won't be disappointed.

VENIDIUM

VERBENA HYBRIDA GRANDIFLORA

A magnificent new strain of Verbenas, of robust, compact habit and free blooming. The trusses are immense, the individual florets measuring an inch in diameter. These Verbenas are fixed and come true from seed.

Seed can be started in the house and transplanted to the garden when the weather is warm, or sown in the open ground, thinned and transplanted. Verbenas from seed are much more thrifty and less liable to rust than from cuttings. Annual. 1 ft. high.

927 Royale—This is a Verbena of enormous size, the indivi-
dual florets measuring over an inch and a quarter in diameter.
The color of this new Verbena is a rich, deep, royal blue with
a large creamy-yellow eye. 18-oz., 45c. Pkt15c

928 Etna-Large trusses of intense geranium-red with a	a small
creamy-yellow eye. The individual florets are over on	e inch
in diameter. ½-oz., 45c. Pkt	15c

929	Coccinea	—Scarlet,	small e	eye.	½-oz.,	45c.	Pkt15c
			,			,	1/

930	Lucifer—An	improved	strain,	vivid	scarlet.	⅓-oz.,
45c.	Pkt	• • • • • • • • •			• • • • • • •	15

931	Luminosa—Flame-pink,	shading to salmon.	½-oz.,
45c.	Pkt		156

934	Pure white—1/8-02., 45c.	РКт	
022	Boss Stallate Boss wink	mith mhite are	1/ 00 450

934	Mammoth	Mixed-Comprising	a	wonderful	range	of
char	ming colors in	every conceivable sha	de.	1/4-0z., 4	Oc. Ph	ct. 10c

VERONICA (Speedwell)

935	Spicata—An elegant border plant, growing about 1½ ft.
high,	producing long spikes of bright blue flowers in June and
July.	Hardy perennial. 16-oz., 60c. Pkt

936	Repens	-The con	npact	plants	form a	close	mat	of bright	
green	foliage,	with pale	blue i	dowers	in the	spring	g; an	excellent	
plant	for the r	ock-garde	a. H	ardy pe	erennia	l. He	ight,	2 inches.	
1.00	80c	Pkt							25

VINCA (Periwinkle)

Valuable for bedding, seed should be sown early. Annual.

937 Mixed—White and pink. 1/4-oz., 40c. Pkt......10c

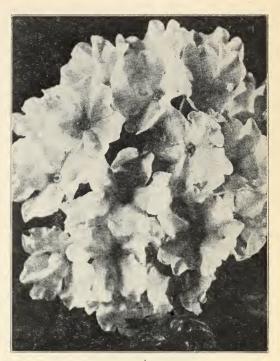
"WILD GARDEN" FLOWER SEED

This comprises a mixture of annuals, biennials and perennials and consists of sorts growing at moderate heights. No vines, trailers, or very tall growing plants being used in it.

944 Large Pkt., 10c. Oz., 25c. 1/4-1b., 75c. 1 lb......\$2.50

XERANTHEMUM (Everlasting Flower)

945 Double Mixed—Bright and pretty "Everlasting" with silvery foliage and silky flowers in pink, white and purple. Pkt.10c



Verbena Grandiflora Type

VIOLA CORNUTA (Tufted Pansies)

A tufted plant of strong growth bearing a profusion of faintly scented flowers the size of a small Pansy. Valuable for the border or rock garden. Grows in sun or half shade. 5 to 8 inches high. If the plants are sheared several times during the season so that the flowers do not go to seed, they will bloom from late April until frost. Perennial.

938 Apricot (New)—A beautiful addition to this very popular type of Violas; a rich apricot shade, tinged orange towards the center. Very effective in the rock garden. Pkt..25c

80940 Rosy Gem-Dwarf compact habit, color rosy-pink. Pkt. 15c

Pansies, and of vigorous growth, forming deep-rooted compact tufted clumps. Planted in masses or lines they form perfect mats covered with myriads of flowers. 1/8-oz., 50c. Pkt...10c

VIOLA ODORATA

Sweet-scented English Violet

WALLFLOWER



Dahlia Flowered Zinnia

ZINNIAS (Youth and Old Age) RECENT INTRODUCTIONS

946. Crown O' Gold—This new Zinnia derives its name and distinction from the fact that each petal of the flower is overlaid with a deep golden-yellow at the base, while carrying out the individual flower color at the tip. The effect is a very pleasing two-tone color harmony. The color range comprises the more popular shades, including old rose, cream, yellow, carmine and burnished-red; the latter a new shade in Zinnias. Pkt...25c

948 El Dorado—This is a very pleasing and fascinating shade of rose on salmon that does not fade in the sun's rays. Like Old Gold, this is an immense flower. Pkt......1

949 Luminosa—This variety can be briefly described as various shades of bright, deep pink with a light suffusion of salmon, a few tones darker than Exquisite. Many flowers found in this strain are most pleasing in form. We consider this a valuable addition for those who wish a great variety in these tones. Pkt.

All Dahlia Flowered Zinnias offered on this page have been secured from the originator, Bodger, in California.

ZINNIA LILLIPUT

This type of Zinnia forms a bush about 1 foot high and is covered with small, very double flowers in profusion.

cove	red with small, very double flowers in profusion.
968	Canary Yellow-1/4-oz., 40c. Pkt10c
969	Crimson Gem—1/4-oz., 40c. Pkt10c
970	Golden Gem—1/4-oz., 40c. Pkt10c
971	Salmon Rose—1/4-oz., 40c. Pkt
972	Flesh—1/4-oz., 40c. Pkt10c
973	Purple—1/4-oz., 40c. Pkt
974	White Gem—1/4-oz., 40c. Pkt10c
975	Mixed Colors—1/4-oz., 40c. Pkt10c
076	Collection one Plat such of the above 7 veriation for 50a

ZINNIAS (Youth and Old Age) GIANT DAHLIA FLOWERED

The latest development in Zinnias. This type was awarded the Gold Medal and the Award of Merit by the Royal Horticultural Society of England, at the Chelsea Flower Show in London, England, in June, 1924. It took seven years of painstaking care and selection to produce this type of Zinnia, but it is now recognized the world over as being the largest and most beautiful Zinnia. The Dahlia Flowered Zinnia is a good forcer and money maker for florists. The variety Polar Bear is used as a bunching flower for Mother's Day, while Old Rose, Oriole, Crimson Monarch, Exquisite, Canary Bird and Scarlet Flame are recommended to force as desirable colors for florists for early spring trade. The plants are sturdy and the flowers, often measuring 6 inches in diameter and 4 inches in depth, closely resemble the Show Dahlia. Annual.

- 950 Golden Dawn—A beautiful golden-yellow of immense size and good form. Very attractive. Pkt......15c
- 952 Exquisite—By far the most pleasing of our collection.

 Truly Dahlia flowered as regards form and size. Color, light rose with center a deep rose. (Tyrian Rose). Pkt........15c
- 953 Old Rose—This is adequately described by its name, as it is of the real old-rose shade; it is large, and for charm and beauty we consider it ranks next to Exquisite. Pkt.......15c
- 954 Illumination—Similar to Exquisite, but a striking color of deep rose. (Tyrian Rose.) Pkt......15c

- 958 Meteor—A rich, glowing deep red (Spinel Red) and the darkest of all the red shades. Fine form, with good depth of petal. Very large and more floriferous than other reds. Pkt..15c

- 961 Dream—A fine, deep lavender, turning to purple (Mallow Purple), a new, desirable shade in Zinnias. Pkt......15c
- 962 Purple Prince—A fine, deep purple (Rhodanthe Purple), large and well-formed. Pkt......15c
- 964 Canary Bird—A delicate shade of primrose, very large and holds its color well until out of bloom. Pkt......156

- 967 Collection, one Pkt. each of 6 colors (value, 90c) for 60c

ZINNIAS VARIOUS MIXTURES

- 978 Dwarf Double Mixed—Oz., 50c. Pkt......10c
- 979 Dwarf Curled and Crested—Twisted and curled petals which make very effective flowers. 1/4-oz., 25c. Pkt......10c

All 10c Packets are 3 Packets for 25c.

COLLECTION OF FLOWER SEEDS

The following collections are made up of the popular sorts, that will thrive under the average garden conditions.

ANNUALS FOR CUT FLOWERS

A dozen sorts that will give you a garden display as well as cut flowers from early summer until frost.

400 A collection of 12 packets (our selection)......90c

TWELVE OLD-FASHIONED HARDY PERENNIALS

This collection is made up of the old-fashioned hardy perennials that were popular in our grandmother's gardens, including Columbine, Hardy Larkspur, Foxgloves, Sweet Williams, Shasta Daisies, and others equally desirable.

401 A collection of 12 packets (our selection).....\$1.00

ANNUALS FOR ROCK GARDENS

A desirable collection of annuals for the newly made rockery that should give results the first year. At the same time plant Hardy Perennial seeds for permanent results from the following collections: "Perennials for Rock Gardens", found on this page or the complete collection of 25 varieties of Rock Plant seeds found on page 34.

402 A collection of 8 packets (our selection)................................60c

PERENNIALS FOR ROCK GARDENS

This collection is made of varieties that will succeed under conditions found in the average rock or wall garden, including Rock Cress, Golden Alyssum, Columbine, Primula, Aubrietia and others equally popular.

403 A collection of 12 packets (our selection)......\$1.00

Collections of Asters, Sweet Peas, Zinnias, etc., are offered under their respective heads from page 35 to page 54.

VINES; CLIMBERS AND TRAILERS

AMPELOPSIS

(Japanese or Boston Ivy) Hardy Perennial

980 Veitchi—The leaves are olive green turning to scarlet in the autumn. Perfectly hardy; grows 30 to 60 feet. It clings firmly and permanently to walls, trees, etc. Very desirable.

BALSAM-PEAR AND APPLE (Momordica)

Tender annual climbers bearing ornamental fruits of various colors. They grow 10 to 12 ft. high. Have light green foliage, rather large leaves and are very graceful.

981 Balsam Apple—Like Balsam Pear with foliage smaller and smaller fruits, very nearly round. Green, striped when young, afterwards becoming scarlet. \(\frac{1}{2}\dot{-oz.}\), 25c. Pkt....10c

CANARY BIRD FLOWER

983 Canary Bird Flower—A beautiful climber with small, beautiful, rich yellow flowers and dark foliage, the leaves resembling palm leaves. It is a quick grower attaining a height of 12 ft. Blooms profusely from July until frost. Pkt..10c

CARDINAL CLIMBER

COBAEA SCANDENS

An attractive, rapid growing Climber with large bell-shaped flowers which at first are green but gradually change to a deep violet blue. The foliage is handsome, dark green; a great profusion of tendrils is produced and it is valuable for arches, trellises, arbors and attains a height of as much as 30 ft. in a season.

CYPRESS VINE

A beautiful rapid growing Climber with delicately cut vivid green foliage and star-like flowers which make a most effective contrast with the leaves. Annual.

Seed is usually sown outdoors where the plants are to remain, covering 1½ inches deep. About 15 ft. high.

986 Mixed-Mixed scarlet and white. Oz., 50c. Pkt.....10c

GOURDS

987 Mixed—Mixture of small sorts including many curiously shaped and ornamental sorts. Oz., 25c. Pkt......10c

HYACINTH BEAN (Dolichos Lablab)

A beautiful tender annual climber bearing large clusters of purple and white flowers which are afterwards followed by ornamental purple seed pods. Height, 15 to 20 ft.

988 Mixed Colors—Oz., 25c. Pkt...............................10c

ICE PLANT—(Mesembryanthemum)

MOON FLOWERS (Evening Glory)

The well-known and popular tender perennial so largely used. It grows to an immense height, sometimes 30 to 40 ft. in a single season and is literally covered with large white flowers 3½ to 4 inches across which open in the evening and are very sweet scented. Useful for covering old fences, dead trees, stables, and unsightly places, being extremely rapid growing with a profusion of large leaves.

Seed should be started indoors and transplanted to the open after the weather is warm. As the outer seed shell is particularly hard, a small hole should be filed in it or part shaved off with a knife before planting. Soaking in very warm water 24 hours is beneficial

MORNING GLORIES

The well-known and popular hardy annual climbers which produce large trumpet-like flowers of many brilliant colors. Seed is sown where they are to bloom, thinning as may be desired. Height, 10 to 15 ft.

991 Heavenly Blue—Immense flowers of bright sky blue, very beautiful. 4-oz.,30c; oz., 90c. Pkt.............10c

992 Japanese—Flowers of largest size, often 3 inches across, in magnificent colors and brilliantly marked. Oz., 25c. Pkt.10c Nasturtium (Tall)—See page 46.

SCARLET RUNNER BEANS

993 Scarlet Runners—A great favorite in England and Europe, not only as an ornamental climber, but for the delicious edible beans which succeed the spray of bright scarlet peashaped blossoms. Oz., 20c. Pkt.................10c

THUNBERGIA (Black Eyed Susan)

An attractive climber growing 4 to 6 ft. long which is largely used for garden vases, window-boxes, hanging baskets, etc. Flowers are about 1 inch across being of creamy-white, buff and orange colors with very dark brown throats; very free blooming. A very attractive plant both in foliage and in abundance of flowers.

GENERAL LIST OF GRASS SEEDS



Prices of all Grass Seeds are subject to fluctuations. We will be glad to quote you firm prices on request. Orders entrusted to us will be filled at the lowest market price on the day received.

TIMOTHY (Phleum pratense)

It is the most desirable of all grasses for hay but should not be grazed as the tramping of cattle hoofs causes it to die. In this section Timothy is best suited to low, flat or alluvial soils where there is a fair amount of moisture but does not grow well in water sogged soil. Requires alone, 1 pk. per acre; if with Clover, 8 lbs. Timothy and 5 to 6 lbs. of Clover.

RED TOP OR HERD'S GRASS

(Agrostis alba)

Particularly suited to low and wet situations and affording a splendid pasturage and fair crops of hay. Ripens at about the same time as Timothy and excellent to sow with this grass if pasturing of meadows is contemplated. It is also valuable to sow on alluvial land liable to wash and when once established and some care taken will last indefinitely.

Fancy (free of chaff) requires 8 to 10 lbs. alone or 3 to 4 lbs. (in mixtures) per acre.

Unhulled (seed with hull on)-1 bu. per acre.

KENTUCKY BLUE GRASS (Poa pratensis)

A well-known pasture grass which grows well on any stiff or loamy soil in central or northern states. It is indigenous to sections of Ohio, Kentucky and Missouri and in these sections is the main grass depended on for pasture or for stock grazing for which these sections are famous. There is no better or more nutritious pasturage.

Kentucky Blue Grass is also largely used for lawns and when once established, lasts indefinitely. It is slow starting, however, and for lawns should be mixed with other quick growing short grasses. For pastures, sow 1½ to 2 bus. per acre; for lawns, 3 to 4 bus. per acre.

CANADIAN BLUE GRASS (Poa compressa)

Closely akin to Kentucky Blue Grass but not nearly so valuable for general purposes. Canadian Blue Grass is particularly well suited to high, dry situations and rocky soil, also under trees where the soil is more or less impoverished and very dry. It does not make a very good turf as it produces a large amount of stems and comparatively little forage. Valuable for mixtures and upland soil for pasture.

ORCHARD GRASS (Dactylis glomerata)

Particularly suited to upland, loamy or moderately stiff soils. It ripens 3 weeks ahead of Timothy and is excellent to sow with Red Clover. Usually yields two crops and is one of the most valuable grasses for both pasturage and hay.

Requires 1½ to 2 bushels per acre; if with Red Clover, 1 to 1½ bushels of Orchard Grass to 5 to 6 pounds of Red Clover. If for seed purposes the same quantity of Clover and ¾ of a bushel of Orchard Grass.

MEADOW FESCUE (Festuca elatior)

A most valuable grass for permanent pasture. It grows best on low, damp soil, but does not attain its full productive power till the second or third year. (Called Evergreen Grass in some sections.)

Requires one bu. per acre, if alone. In mixture, from $\frac{1}{2}$ to $\frac{1}{2}$ of a bu.

TALL MEADOW OAT GRASS (Arrhentherum elatius)

A very fine grass which is suitable for upland soils and especially valuable for mixture with Orchard Grass. It ripens about the same time and does not have a tendency to grow in clumps or tufts—hence, forms a better sod. Cut when in bloom it is very nutritious and it affords wonderful amount of pasturage. Requires alone 1½ to 2 bus. per acre; in mixture from ½ to ¾ of a bu.

To sow cheap seeds to save money, is like stopping the clock to save time.

GENERAL LIST OF GRASS SEEDS-Cont'd

BROME GRASS (Bromus inermis)

A hardy perennial, which can be used for meadow or for pasture. The seed may be sown from spring to fall. It is especially valuable for pasture, the vigorous root stalks forming a firm sod. Brome Grass is more drought resistant than ordinary eastern meadow grasses and does not require a heavy good soil, but thrives on loose, and comparatively poor land. The seed is usually sown broadcast at the rate of 20 lbs. per acre.

PACEY'S IMPROVED SHORT RYE GRASS PERENNIAL RYE GRASS

(Lolium perenne)

A quick growing grass which is most suitable for mixtures, pastures, hay and lawns. Succeeds well on almost any soil not water sogged and affords good, quick, nutritious grazing. If alone, requires 1½ bus. per acre. In mixture, from 2 to 3 pks. per acre.

ITALIAN RYE GRASS

(Lolium italicum)

In growth somewhat similar to Perennial Rye Grass but little quicker maturing. It is especially liked in Southern States and in most of the low Delta country yields good crops of very early hay. Valuable for mixture or quick hay crop. Requires same quantity per acre as Perennial Rye Grass.

AMERICAN GROWN RYE GRASS

Also known as Western Rye Grass. It is inclined to be an annual and is especially valuable for use in lawn mixtures; it is a quick growing grass and succeeds well on almost any type of soil.

ROUGH STALKED MEADOW GRASS

(Poa trivialis)

A splendid grass of spreading, thickly matting, stoloniferous rooted species; leaf blades narrow, flat and dark green in color. Forms a fine turf where few other grasses can exist and especially adapted for shady places and under trees. For pastures, sow $1\frac{1}{2}$ to 2 bus. per acre; for lawns, 4 to 5 bus. per acre. (14 lbs. per bu.)

RED OR CHEWINGS FESCUE

(Festuca rubra)

A creeping-rooted species, forming a close and lasting turf and especially adapted for dry, sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf-courses and particularly on putting greens. 40 lbs. to the acre. On putting greens sow 8 lbs. to 1000 square feet. (24 lbs. per bushel.)

SHEEP FESCUE

(Festuca ovina)

An extremely valuable pasture grass for high, dry situations or rocky or gravelly soils. It affords excellent grazing and withstands adverse conditions often when many other varieties burn out. The foliage is of fine texture and it has a tendency to grow in tufts and close grazing is desirable. Especially valuable for mixture.

Requires alone 1½ to 2 bus. per acre. In mixture ½ to 1 bu.

CRESTED DOGSTAIL

(Cynosurus cristatus)

Very much esteemed for lawns and mixtures in many of the Northern States, producing a quick growth of short grass, which is, however, of little forage and many stems.

BERMUDA GRASS

(Capriola dactylon)

A valuable grass for the South and for tropical climates; will not endure frost. Sow 5 to 8 lbs. per acre.

SEASIDE OR COOS COUNTY BENT GRASS

(Agrostis maritima)

This Bent Grass is one of the most vigorous stoloniferous creepers, also spreads under ground by root stalks or rhizome, making a deep, reinforced sod. Seems hardy and suited to sour soil conditions, and grows on a wide range of soils. Excellent for lawns, greens, parks and playing fields. Needs considerable care, cutting, water and fertilizer.

It is slow to develop its creeping characteristics, but after it has done so, makes a very excellent uniform quality and color in the turf. Sow about five pounds to 1,000 square feet.

RHODE ISLAND OR COLONIAL BENT GRASS

(Agrostis tenuis)

A grass of very splendid appearance making a fine close turf, dark green in color. It is adaptable to different soils and various locations and will stand dry weather. It has a spreading habit, a soft leaf and is useful either in mixtures, on the green, or fairway. From 60 to 100 lbs. of seed should be used per acre.

MIXED GERMAN BENT

As the name implies it is composed of different types of Bent Grasses. It is exceptionally useful for lawns or fairways, also for putting greens.

Special Mixtures

for

GOLF COURSES,
AIRPORTS AND LANDING-FIELDS,
POLO GROUNDS, ATHLETIC FIELDS,
LAWNS.

also

PASTURES and MEADOWS

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer mixtures which can be relied on to be the very highest quality and prices are very reasonable. See pages 2 and 3 for descriptions.

Constant experimenting has shown that a heavy stand and prolonged growth can only be obtained by sowing a mixture of several kinds of grass seeds. In our special mixtures we use varieties best suited to the different soils and purposes for which they are recommended. Those for permanent pasture are composed of grasses that succeed each other in growth, thus furnishing good grazing from early spring until late fall.

CLOVER, GRASS AND GRAIN SEEDERS, SEE PAGE 90.

"ACME" SME BEST CLOVER SEEDS

Prices are so changeable they cannot be given here. Will be glad to quote firm prices on request.

Bags for Clover Seed holding 2½ bus. extra and must be remitted for on all orders.

RED CLOVER (Trifolium pratense)

Too well-known to need extended description. Can be sown either in the spring or fall and requires 8 to 12 lbs. per acre alone or 5 to 6 lbs. per acre if in mixture with grasses.

MAMMOTH OR SAPLING CLOVER

Similar to Red Clover but of larger growth and blooms 3 weeks later—hence, more valuable for sowing with Timothy. It also forms better aftermath than Red Clover. Requires same quantity of seed as Red Clover per acre. Current prices on request.

ALSIKE CLOVER (Also called Swedish Clover)

Similar in growth to Red Clover but not quite so vigorous. Blossoms flesh color. Blooms later and at the same time as Timothy. Valuable for hay and more satisfactory for pasturage as it lasts longer and will stand more grazing.

If sown alone requires 4 to 6 lbs. per acre or in mixture 2 to 3 lbs. per acre.

BOKHARA OR SWEET CLOVER

It is suitable for almost all classes of soil and especially desirable on loamy, sandy or alluvial soils. Formerly it was used mostly for waste lands but many prominent stock raisers are using it extensively for both pasturage and hay, in many cases abandoning Alfalfa and substituting Sweet Clover.

Sweet Clover is of vigorous growth and withstands extremes of heat and cold as the tap roots penetrate the soil very deeply, and it does well on both barren hillside as well as bottom lands. Matures early. Can be cut two or three times in a season; has a delightful and sweet scented odor and the blossoms are particularly attractive to bees.

We offer the following classes:

WHITE SWEET CLOVER

A biennial growing 5 to 6 ft. high having white blossoms borne in large panicles and extremely sweet scented. Reseeds itself if undisturbed or not cut in bloom.

Hulled Seed (cleaned seed) requires 10 to 12 lbs. per acre. Bage extra. Current prices on request.

Unhulled (Seed with the hull on).

YELLOW SWEET CLOVER

A biennial not quite so tall growing as the White but more desirable for pasturage as the life season is much longer, producing an abundant yield of forage.

GRUNDY COUNTY SWEET CLOVER

A white blossom biennial. The growth starts early in the spring and makes an abundance of early pasturage. It is unusually hardy and a good soil builder. The stem and leaves are finer and make a better hay than the Common Sweet Clover.

When grown for seed, the yields are from five to ten bushels to the acre. Unlike the common biennial, it grows to a height of three to five feet and may be harvested with the ordinary grain binder. The seed ripens uniformly earlier than the common.

Sow at the rate of 12 pounds of scarified seed per acre.

HUBAM SWEET CLOVER

An annual Sweet Clover with a growth of $3\frac{1}{2}$ to 6 ft. Is particularly good for bees as it blooms the first year. Also excellent as a green manure crop. Most favorable results are obtained by sowing broadcast. Requires 12 to 15 lbs. per acre.

JAPAN AND KOREAN CLOVERS (Lespedeza)

The acreage sown to these Clovers is rapidly increasing each year; they are becoming very valuable as forage crops, used extensively for hay; also very popular for grazing. Lespedeza is an annual, but once planted reseeds itself satisfactorily if given a short period of rest. Being leguminous plants, it is very profitable as a soil builder, growing on almost any character of soil; thriving well on sour land.

Seed can be sown during the early spring, or as late as May 15th broadcast, at the rate of 25 pounds per acre; being customarily sown on old pastures where plowing is not necessary, producing good yields under ordinary conditions. Also, excellent to sow with other grasses, affording ample grazing through the hot summer months. Quantity of seed sown per acre should be reduced according to stand of grass.

The Korean Clover is larger, coarser, and blooms earlier than the Japan Clover.

WHITE CLOVER (Trifolium repens)

Well-known and indigenous to most soils throughout this section. It is largely used for lawns and pastures, producing very quick growth and covering the soil with a bright, vivid green very thickly. Particularly suited to sandy soils and in some localities where grasses do not grow well.

Requires 3 to 4 lbs. per acre alone or in mixtures 1 to 2 lbs. "ACME" #M Best Grade.

CRIMSON OR SCARLET CLOVER (Trifolium incarnatum)

This Clover grows about two feet high, makes good hay and is excellent for feeding green, the yield being immense; and after cutting it at once commences to grow again, and continues until freezing weather, but being an annual, dies after maturing its seed. Should be sown in August to October, also early spring. (15 to 20 lbs. per acre.)

ALFALFA OR LUCERNE (Medicago sativa)

Alfalfa is being more generally grown, as experience is teaching our farmers the proper methods to follow. Once established, it is such a profitable crop that every farmer can afford to take great pains to obtain a stand. It requires cutting at least twice the first season, even if not large enough to make hay. Cutting destroys any weeds that may come up in it and gives the Alfalfa a chance. Must be sown at the rate of 10 to 15 pounds per acre when sown broadcast. Different soils do not seem so difficult to overcome, especially where they can be properly drained, pulverized, sweetened and inoculated.

Alfalfa does not thrive on acid or sour land.

A liberal dressing of fine ground lime will be found a great benefit to the soil. May be sown from April 1st to June 15th for the early spring sowing, either drilled or sown broadcast. If broadcast, cover lightly with a light drag or with single stroke of a harrow.

Much seeding is now done later and many prefer sowing from July 15th to September 15th. When seeded late it gives the grower an opportunity to have his land clean and free from weeds, and if weather conditions are favorable a crop is almost

Alfalfa naturally prefers a deep, sandy or gravelly subsoil. Roots from 3 to 15 feet deep and a good stand on properly selected land should yield from 3 to 5 cuttings a year. We can supply Kansas grown, Idaho grown and Grimm Alfalfa. Current prices on request.

Acme Inoculation will insure a sturdy alfalfa stand. Inoculate the seed this year. See page 59.

J. CHAS

M°CULLOUGH

INOCULATION ALFALFA and SWEET CLOVER

for 60 lbs. or less of seed

SEED CO. ACME

NOCULATION

FOR ALL LEGUME CROPS

The legume crops, such as alfalfa, the clovers, soy beans, vetches, peas, etc., are known as soil builders because certain soil bacteria make nodules on their roots in which nitrogen is gathered from the air and stored. If these special bacteria are not present, the crop robs the soil instead of building it up. The only way to make sure that there is a sufficient supply of nodule bacteria in the soil is to inoculate the seed before sowing with a culture of the right kind of bacteria. Inoculation produces the following results:

- Insures Better Stands. The legume crops require plenty of nitrogen in their early growth. Inoculation makes an ample supply available.
- 2 Insures Bigger Crops. Inoculation by increasing available plant food promotes the most vigorous growth and produces bigger crops.
- By feeding nitrogen to plants, their protein content and hence their feed value, is greatly increased.
- Adds Fertility to Soil. Inoculation provides plenty of nitrogen for the crop and, when it is turned under, adds to the soil an average of 100 lbs. of nitrogen per acre.

Acme Inoculation Easiest and Surest Form of Inoculation

Acme Inoculation is a scientific pure culture of root nodule bacteria, prepared on special food jelly in bottles with patent stoppers which permit the bacteria to live and breathe and maintain their vigor. Each culture contains plenty of bacteria to inoculate the quantity of seed marked on the bottle. The cost per acre is very small.

Moreover Acme Inoculation is easiest inoculation to use, requiring no equipment or experience. Takes only a few minutes. Complete directions on every bottle. Results are sure. Buy your Acme Inoculation when you buy your seed. Always specify names of crop as well as size of culture wanted.

For Garden Peas, Sweet Peas, Garden Beans and Limas:

Always specify name of crop as well as size of culture wanted.

PRICES

For Alfalfa, Sweet Clover, Red Clover and other Clovers (specify which):

1-bu. size, 65c; 2½-bu. size, \$1.25; 5-bu. size, \$2.25.

For Soy Beans, Cow Peas, Field Peas and Beans and Vetches (specify which):

1-bu. size, 35c; 2-bu. size, 60c; 5-bu. size.....\$1.25

SEED CORN

SEED CORN TREATMENT REDUCES DISEASE DAMAGE

Seed disinfection with Improved Semesan Jr. will help greatly to prevent damage by diseases to the roots, stalks and ears of field and sweet corn. See page 76.

All our Field Corn Seed is well matured, thoroughly cured and shelled with greatest care. We test all varieties before sending the seed to our customers that there may be no doubt as to the vitality.

Will be glad to quote you prices when planting season arrives and know you will find our prices as low as high-grade seed can be sold.

WHITE VARIETIES

EARLY NORTHERN WHITE DENT

For very early planting or very late planting, as it matures its crop in about 90 days. The ears are 8 to 9 inches long, of 16 to 18 rows. Grains moderate, white and dented.

This is largely planted in many sections for green table corn, as it produces 2 good ears to the stalk and is profitable.

HICKORY KING CORN

The ears are small, 2 to 3 on a stalk. It has the largest grains and the smallest cob of any white corn ever introduced.

RED COB ENSILAGE

One of the best fodder corns, either to feed green, to put up for the silo, or to cure for hay. It is sweet, tender and juicy; has short joints and therefore an abundance of leaves, and grows to a fair height, but coarse-stalked. The seed is white on a red cob.

YELLOW VARIETIES OF SEED CORN GOLD STANDARD LEAMING

An ideal feeder's corn of light, golden color; ripening in about 110 days; ears slightly tapering and cylindrical. They grow 8 to 10 inches long, 7 to 8 inches in circumference. The ears are from 16 to 22 rows. The cob is red and of moderate size.

OHIO YELLOW DENT

A medium early yellow variety, producing wellfilled ears of good length and filling out remarkably well, even under adverse conditions. Stalks of good height, producing one or two good ears, which average 10 to 11 inches long, 14 to 16 rows. Grains flinty, deep; slightly dented, rich color, and fine feeding quality. Ripens in about 110 days.

WOODBURN YELLOW DENT

An extra early variety. The cob is small and well filled from butt to tip, grain deep.

On account of its early maturity (about 90 days), and exceptionally good yielding qualities, it is especially popular for a quick maturing sort; also for very late planting.

SEED OATS

SWEDISH TYPE WHITE AND FULGHUM

Our Oats are carefully selected stock and well recleaned. Do not confuse them with the ordinary Feed Oat.

WINTER TURF OATS

For fall and spring sowing. Will grow 4 to 5 feet high; straw is very palatable for stock. Require 1½ to 2 bushel per acre.

Write for current prices and varieties.

COW PEAS

The Great Soil Improving Crop

Grows best on light or sandy soils. Have a high feeding value. Belonging to the bean family, they are a nitrogen gathering plant and if inoculated will improve the productiveness of the soil.

We usually carry the following varieties:

Whippoorwill

Brabhams

New Eras

Early Blacks

Mixed Varieties

Sow 1½ bushels per acre after danger of frost is passed.

Write for prices

USE ACME INOCULATION

VETCH

HAIRY OR SAND (Vicia Villosa)

It is a winter annual and is especially well adapted to sandy soil and will do much to build up any poor soil, Withstands cold weather. Should be sown from latter part of August to middle of September. Can be sown with rye.

SPRING VETCH (Vicia Sativa)

Used for sowing with oats for producing a spring crop of hay.

CANADA FIELD PEAS

Grown with oats will make a fodder or hay which doubles the production of milk.

They should be sown in March or early April, two bushels of peas and two bushels of oats to the acre. The peas should be sown first and plowed under about 4 inches deep; the oats then sowed and harrowed in. They will be ready for cutting about the end of June, when the oats are in milk and the pods formed on the peas. Write for prices.

SUNFLOWER (Mammoth Russian)

The best variety for the farmer. Drill in seed at the rate of about 8 to 10 lbs. to acre. It is much relished by poultry and horses. Current prices on request.

"Crops tha grow seed in pods should give two to five times the yield if inoculated with 'Acme' Inoculation'. See page 59.

"ACME" BEST MILLET

TRUE TENNESSEE CULTIVATED GERMAN

(Round Seed.) This Millet withstands drought better than all other varieties. It is used as a summer hay crop and particularly adapted to rich or bottom soils. It should be sown thickly and cut when, the heads are in bloom, never allowing to get old or seed to form as this causes a great drain on the soil besides materially injuring the quality of hay. Very useful for cleaning rich, foul lands of weeds as its quick, abundant, luxuriant growth smothers most weeds. Sow one bushel per acre in May, June or July. Two crops can be seeded on the same land in one season, if desired.

WHITE WONDER MILLET

Produces a very large head similar to the Tennessee Millet. Under certain growing conditions it is quite difficult to distinguish it from the cultivated millet. The heads will run from six to eight inches. A very desirable feature is its earliness; the foliage is also very heavy and the leaves broad, resembling Golden Millet. It produces an immense amount of excellent fodder which cures very readily.

HUNGARIAN

Specially adapted to rich or alluvial soil. It makes a finer quality of hay than Millet on very rich soil as it does not grow so coarse. Cut at the right time, which is in bloom, and cured properly it makes a nutritious hay; is especially popular with dairymen.

Sow from ¾ to 1 bushel per acre in May, June or July. Current prices on request.

KAFFIR CORN

Foliage and stalks do not contain saccharine matter—hence, are not so valuable for feeding but the enormous yield of grain makes it very profitable. The grain is very largely used for poultry and stock feeding, containing a high percentage of starch. Current prices on request.

SOY BEANS

Soy Beans do well on both light and heavy soils. They are valuable as a forage crop and improve the soil and increase following crop production. They are a valuable pasture crop for hogs as well as other stock, and can be sown by themselves for this purpose; or in the corn rows and the hogs turned in to feed on them after the corn is harvested.

The value of Soy Beans as a grain crop makes it particularly adapted to system of rotations. Like other legumes, Soy Beans are able to utilize the nitrogen of the air, adding it to the soil. Soy Beans should therefore be inoculated. Actual experiments have shown that legumes not inoculated rob the soil; inoculated they feed the soil. Sow 1½ to 2 bushels per acre broadcast, in drills 45 pounds, after danger of frost is past. Use "ACME" Inoculation for BEST results.

We carry the following varieties in stock. Write for full description and current prices.

Best	for	Hay	Crop
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Wilson Black Ebony Virginia

Other Varieties

Manchu Dunfield Illini Hollybrook Midwest Itosan Black Eyebrow Mammoth Yellow

Use Acme Inoculation

RYE

MICHIGAN ROSEN—HOME GROWN

Our Rye is carefully selected stock and well recleaned. Do not confuse it with the ordinary milling Rye.

BARLEY

Barley needs a rich land and lighter than that adapted to Wheat. It should be cut before fully ripe, if for hay, as it is then of better quality and less liable to shell. Sow 1½ to 2 bushels if drilled; 2 to 2½ bushels broadcast. (48 lbs. per bushel.)

Spring Barley, Beardless Barley—Current prices on request.

VELVET OR BARBLESS BARLEY

Velvet Barley is a Spring Bearded Variety, the beards are smooth, there being no barbs. It is reported to us that the Velvet Barley straw is suitable for feed and the crop handles as nicely as oats. Sow two bushels to the acre.

DWARF ESSEX RAPE

This plant makes excellent pasture for both sheep and hogs. It is an excellent conditioner for all live stock, except milk cows. Best results are obtained by planting in two separate fields; pasturing alternately about 10 days each. Good results are obtained by planting rape anytime from early spring to midsummer.

Sow 3 pounds per acre in drills; 6 pounds broadcast.

BUCKWHEAT

A splenid crop for very poor land. It is largely used for bees.

Culture—Sow in June, July or August at the rate of ¾ of a bu. to 1 bu. per acre broadcast, covering with a smoothing harrow. It does not mature its grain until the cool nights—hence, too early sowing is not desirable.

Japanese—This produces the largest yield of finest and largest kernel buckwheat. Superior to all other sorts. Current prices on request.

Silver Hull—Much improved over the common Buckwheat. Grains, however, smaller than Japanese but yielding abundantly. Current prices on request.

SUDAN GRASS

Sudan Grass produces an immense yield of nutritious hay. It can be cut twice in a season if planted early in the season but after frost danger. Grows 3 to 5 feet high. It is adapted to growing in all kinds of soil but produces the largest yield in warm temperate latitude. After first cutting it stools enormously and then furnishes exceptionally fine pasture for all stock, excepting milk cows. It is killed by the first frost.

8 to 12 pounds in drills $2\frac{1}{2}$ to 3 ft. apart or broadcast 20 to 30 pounds per acre.

SORGHUM OR CANE EARLY AMBER—EARLY ORANGE

These two varieties are favorites north of the Ohio river, growing 10 to 12 ft. high. It makes an excellent fodder and it is also fine for silage.

RED TOP or IMPHEE

This is a favorite variety for both Kentucky and Tennessee. It can be used for both syrup and stock feeding.

Prices on Cane Seed fluctuate. Our stock is all recleaned and carefully selected. Write for current prices.

BROOM CORN IMPROVED EVERGREEN

This variety produces a long, straight straw of greenish appearance after being cut. It commands the highest price.

Sow 4 to 5 pounds in drills 3 ft. apart per acre, then thin out the stocks to about 70 to the rod. Cultivate same as corn. Cut when the seed is in the milk.

Current prices on request.

"Crops that grow seed in pods should give two to five times the yield if inoculated with 'Acme' Inoculation". See page 59.

SUMMER FLOWERING BULBS AND ROOTS

These include many of our most attractive plants both for foliage and flowers. As a rule they should be planted out of doors after the weather has become settled and warm. After the first

frost and the leaves have turned droopy or yellow, take up and put in a dry cellar or some other place where they will not freeze, storing in paper bags or soil preferably, and then replanting the following year.

TUBEROUS-ROOTED BEGONIAS

They are now used extensively for outdoor planting. Give them a partially shaded position in a light soil and well-drained location, and they will give more bloom than any other plant which will grow in such a place. A soil that will grow it to perfection is turfy matter scraped from the bottom of old sod—one part, and one part sand. Mix these well together, and you have a compost that is friable, porous, and well adapted to any plants having fine, fibrous roots. It is more satisfactory to apply plant-food when needed, and in such quantities as seem to be required, than to make the soil very rich from the start. Water very cautiously until active growth begins, then increase the amount. But at no time during its existence will the plant require more

than enough to make—and keep the soil moist all through. Cdrainage should be provided to guard against over-watering.

DOUBLE FLOWERING VARIETIES

Double—Crimson, rose, scarlet, white and yellow, in separate colors. Each, 30c; per doz., \$3.25. Per 100....\$22.50
Double Mixed—Each, 25c; per doz., \$2.75. Per 100.\$20.00

SINGLE FLOWERING VARIETIES

Single—Crimson, rose, scarlet, white and yellow, in separate colors. Each, 25c; per doz., \$2.75. Per 100..\$20.00 Single, Mixed—Each, 20c; per doz., \$2.25. Per 100.\$17.00

CANNAS

The wonderful improvement to which this popular bedding plant has been developed makes it today one of the best of all summer flowering plants both for flowers and foliage. Its ornamental leaves varying from light pea green to darkest brilliant maroons and bronzes can be used most effectively both in borders or beds. The flower spikes have been developed to enormous size and individual flowers sometimes measure 2 inches across. They are of the most brilliant colors, including all shades from creamy

white through pure lemon yellow, orange, salmon pink, scarlet to deep red velvety marcons. Many of the flowers are tinged with gold, some spotted and others striped until there is a gorgeous display which continues to bloom from early summer until cut by frost.

For best results beds should be deeply spaded and a liberal amount of well rotted manure dug in. A mass of the different colors can be planted together or single plants are effective—the arrangement being largely dictated by ones own taste.

Prices of Named Varieties listed below--Dormant Roots-each, 10c; 3 for 25c; dozen, 75c. By mail, 90c dozen.

GREEN FOLIAGE

City of Portland—A wonderful bright rose-pink, much deeper in color than Hungaria. A free-flowering and vigorous grower. 31/2 feet.

Eureka—The genuine, practical White Canna is found at last. With the advent of Eureka, we are granted good, full-trusses; broad petals; uniform, free and continuous bloom, and a clean, waxy, lily-white color. Plant growth sturdy, with nice foliage.

Gaiety-Gaiety—Scarlet-orange mottled with carmine and edged with clear yellow. Very showy. 4 feet.

Hungaria—Large flowers, borne in trusses of immense size. Color a pure La France pink with satiny sheen. The most popular pink; green foliage. 3½ feet.

Canary Bird—Flower a pure canary yellow, produced on strong erect stalks well above the large, rich green foliage. The color and habits of foliage identical with the President. 4 feet.

Louisiana—Very large, beautiful, vivid, scarlet, orchid-like flowers, often measuring five to six inches across. Foliage a glossy green, edged with a narrow purple band. 5 feet.

Meteor—Deep dazzling crimson flowers, produced in mammoth clusters. Considered by many to be the best crimson. 4 feet.

Queen Charlotte—The center of the petal is a brilliant crimson-scarlet, shaded with crimson and bordered with a wide belt of gold. 3 feet high.

The President—This variety is superior to any other scarlet in quality and also the size of the flower. The foliage is entirely free from disease. 4 feet.

Venus-Rose-pink, creamy yellow border. 31/2 feet.

Yellow Humbert—Has the same habit of growth as the King Humbert. Has green foliage and produces yellow flowers, dotted with red. 4 feet.

BRONZE LEAVED

The Ambassador—A distinguished looking Canna. Flowers vivid cherry-red; has luxurious tropical foliage prettily bronzed and makes a splendid color contrast with its brilliant blossoms. Ambassador has a habit of holding its flowers high above the foliage, a feature which makes this variety especially attractive. 3½ to 4

King Humbert--In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter. Produced in gigantic trusses, and massive, of a rich coppery-bronze. 4 feet.

Shenandoah—4 feet. Flowers salmon-pink borne in large clusters, foliage rich ruby-red.

OUR 1932 MIXED SELECTED COLLECTION

Per doz.....60c By Mail.....75c

CALADIUMS—(Elephant Ear)

A vigorous growing plant which has tremendously large, pendulous leaves borne on long, stiff stems. In rich soil, and with an abundance of moisture, assumes very large growth and is most effective either singly on lawns or planted in centers of beds or as background for other blooming plants.

-	3.	Each	Doz.
7 to 9 in.	circumference	7c	\$0.75
	circumference		1.50
11 to 13 in.	circumference	20c	2.00
	MAMMOTH SIZE		
13 to 15 in.	circumference	30c	3.00

TUBEROSES

Well-known summer flower, having a very sweet scent. Bulbs

MADEIRA VINES

Madeira Vines (Mexican Potato)—A rapid growing vine with bright, smooth leaves which produce intense shade and valuable for covering fences, outbuildings, or screening porches. Plant the roots 2 inches deep. Vines should be trailed on strings or poles. Strong roots. Each 5c; per doz., 40c. Per 100..\$3.00



Caladium or Elephant Ear

DAHLIAS READY ABOUT APRIL 1ST

READY ABOUT APRIL 1ST

One of the most satisfactory of the summer flowering roots, producing an abundance of brilliant colored flowers from July to frost. The different varieties comprise all colors from purest white to deepest maroon. Many of them in two or more colors with edged petals; some double with quilled petals, others broad, flat petals; some twisted and curled, and comprise many fantastic shapes. There are several classes. Our stock embraces the best varieties and prices are very reasonable.

Culture—Plant from May to July. Tubers should be planted about 6 inches deep, laid flat, eyes or sprout up. Allow at least 3 feet between plants, each way. Do not allow over three stocks to grow. Stake the plants. Keeping the suckers pulled off will produce the finest blooms. After frost dig and store in a dry place where they will not freeze. Covering the tubers with peat moss is very satisfactory and always store with the stalk end pointed down.

The size of the tuber does not in any way designate the size

The size of the tuber does not in any way designate the size or quality of the flower. Some varieties of dahlias always produce very small bulbs, while other varieties make larger ones.

Our stock is CHOICE FIELD GROWN Roots, strong

division.

J. CHARLES McCULLOUGH

Hybrid Cactus—The dahlia we have been looking for. A winner of first prize blue ribbons at the Dahlia Show held at Fleischmann Gardens in Cincinnati, Oct. 4th and 5th, 1930, also Oct. 3rd and 4th, 1931, by the National Gardeners' Association and various other flower shows. J. Charles McCullough is a gigantic flower that is easily one of the largest, handsomest and most outstanding of late introductions. The color is entirely distinct. It is a perfect blending of pink and rose, accented by a delicate white line running the length of each perfect petal, which curls and twists very much as a chrysanthemum petal and forms one of the most popular shaded and indescribably beautiful of all dahlias.

J. Charles McCullough dahlia blooms early and profusely. It has long stems, a stiff neck and finely cut foliage that forms a background for the flower even when disbudded. Even when neglected this dahlia blooms beautifully and is satisfactory; but when cared for by the dahlia enthusiast, its loveliness can be surpassed by none. The flowers are full to the center and keep indefinitely when cut. The plant is a strong, sturdy grower, and will be a continual delight to all of our customers who are fortunate enough to own it. Each....

DECORATIVE DAHLIAS

These come next to the Cactus as a cut flower. They are also very showy in the garden, being unusually free bloomers. They are more formal in make-up than the Cactus Dahlias, but not so formal

Jane Cowl—A truly monster dahlia. Has received many awards of merit and prizes. Strong stems hold this large flower of glistening bronzy buff and salmon shades high above the foliage. Each.

Jersey's Beauty—A justly praised decorative of striking loveliness. A perfect bloom of deep, true pink, carried high above the foliage on perfect stems. A famous prize winner. .85c

Each...

Judge Marean—In this large dahlia there is a riot of blending color, ever changing as the flower ages. There is a glowing salmon-pink, iridescent orange, yellow and pure gold, and the shades all blend most beautifully. The large fine flower stands on a long, straight, strong stem facing the garden boldly. Each...

......60с

stands on a long, straight, strong stem racing the boldly. Each.

Kitty Dunlap—A very free-blooming, fine form dahlia of pure cerise rose. The stems are long and stiff. We recommend this dahlia highly for exhibition and cutting. Each.

Mina Burgle—Large, brilliant deep red. Each.

Mrs. Carl Salbach—An immense bloom of a lovely, mauve pink, shading lighter to the center and every petal outlined in deep mauve. The stem is extremely long and strong, holding its immense blossom proudly erect above a tall, vigorous plant. A most valuable and useful exhibition and cut flower variety. Each.

plant. A most valuable and userum cambrata variety. Each.

Wrs. I. De Ver Warner—One of Judge Marean's best creations. Very large beautiful flowers of fine form and subcreations. Very large beautiful flowers of fine form and substance. Color a rich rosy mauve. Stems long and rigid. Very attractive in the garden, and one of the best for exhibition and for cutting. We consider it one of the best dahlias on our list.

Each.

Pride of California—Dark rich crimson of pleasing form and large size. Flowers held erect on splendid stems. One of the best red decorative dahlias for cutting yet introduced.

Each.
Regalia—An exceptionally well-formed, beautiful yellow decorative dahlia. Has long, erect stems and is a free bloomer.

Snowdrift—Pure white, full deep built flower with broad ls. Low bush. One of the best white decoratives. Each..50c



J. CHAS. McCULLOUGH "The Garden Favorite"

CACTUS DAHLIAS

So-called from their resemblance to Cactus flowers. They are characterized by long, narrow, pointed tubular and twisted petals of graded lengths, giving the flowers a striking and attractive appearance. Grand for cut flowers.

Ambassador—The sensation Dahlia since its introduction. Its color is a soft yellow at the center with salmon, amber and pink shadings, gradually deepening toward the tips and outer floral rays. The flowers are of largest size and set on perfect stems. A strong grower and free bloomer from early till late.

white. Each.

Kalif—Its brilliant pure scarlet color and strong, stout stems make it one of the most useful dahlias, both for cutting and exhibition. Each.

Mrs. Edna Spencer—An exceptionally fine variety for all purposes, large size, fine form and above all a free bloomer, on long erect stems. Color silvery lilac, shading to bright orchid pink. Each..

POMPONS OR LILLIPUTIAN DAHLIAS

This class is a miniature form of the show or ball dahlias, having the same round, ball-like form, but much smaller in size. The plants are also smaller, producing the flowers in endless profusion.

Baby Bunting—Exquester
Little Beauty—Splendid lilae; perfect little blooms.

35c. Each. Each. Snowclad—The best pure white pompon. Each......35c

SELECT BALL DAHLIAS These are the old-fashioned dahlias of our mothers' gardens.

OUR 1932 MIXED DAHLIA COLLECTION

Composed only of selected varieties. Nothing under one dozen sold. PER DOZEN..\$1.10 BY MAIL..\$1.25

GLADIOLI

Gladioli are among the most decorative plants in the garden and as a cut flower lends itself readily to any arrangement. If the spikes are cut when the lowest flower is in bloom, the others will open in succession and remain fresh a week or ten days.

open in succession and remain fresh a week or ten days.

Gladioli will thrive in almost any soil except a stiff clay.

Plant the bulbs six to nine inches apart, the large ones four inches and the small ones two inches deep. Make an early planting of the smallest bulbs first as soon as the ground is sufficiently dry and warm. Continue to plant at intervals of two weeks during the spring and early summer; in this way a succession of bloom may be had from midsummer until frost. A free use of water during the season of active growth, particularly as the buds begin to show color, will be beneficial in producing fine blossoms. In the autumn before freezing, they should be dug and the tops allowed to dry down, after which the dry tops, earth and old bulbs can be removed. Store in a cool, dry place, secure from frost until spring. Store in a cool, dry place, secure from frost until spring.

NEW AND RARE RUFFLED GLADIOLI COLLECTION

..\$10.00 Minuet—Generally conceded to be the finest lavender Gladioli ever produced. Large open flowers, good form and substance. The standard by which all other lavender Glads are judged. Each, 25c; per doz., \$2.25. Per 100. \$15 Mr. W. H. Phipps—La France pink, overlaid with non-rose, lighter towards the center, lower petals Mrs. Leon Douglas-Large begonia-rose, spikes Collection A-3 of each (15 bulbs) of above varieties, postpaid. . \$1.65

NAMED VARIETIES

6 of each (30 bulbs) of above varieties, postpaid. . \$2.85

These comprise some of the choicest sorts. If by mail add 7c per dozen for postage.

America—One of the finest varieties for cutting or bedding; color a beautiful soft flesh-pink; orchid-like in its coloring and texture; growth and habit perfect. Each, 6c; per doz., 35c. Per 100 ...

Anna Eberius—Beautiful dark velvety purple, throat a deeper shade, slightly ruffled. The best in its color and a strong grower. Each, 6c; per doz., 50c. Per 100......\$3.50

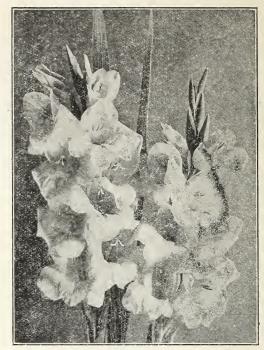
Crimson Glow—A perfect, very large deep scarleterimson; flowers on tall, strong spike. Each, 6c; per doz., 45c. Per 100.......\$3.00

.....\$3.00

Mrs. Francis King—Brilliant vermilion scarlet borne on long spikes. Flowers enormous, sometimes 4½ inches across. Most excellent. Each, 6c; per doz., 35c. Per 100......\$2.50

Mrs. Frank Pendleton—Flushed salmon-pink, with rich maroon blotch on the three lower petals. The most popular flower in florists' shops. Each, 6c; per doz., 45c. Per 100.\$3.00

Schwaben—Clear canary yellow, shading to soft sulphur. Largest flower stalk and leaves of all. Each, 6c; per doz., 50c. Per 100.....



Gladioli

MIXED GLADIOLI

As a safeguard against fungous disease, such as rot, etc., dust bulbs thoroughly with Semesan before planting. See page 76.

HARDY LILIES

Lilies are stately and most beautiful bulbous plants—producing large flowers of exquisite outline and varied coloring. They are hardy even in cold locations with protection, and usually surviving for many years. Ideal locations are in the shrubbery or herbaceous border where the roots are sheltered from the hot sun. Groups of 6 or more lilies of a kind, here and there, in such situations. are most effective. Large isolated clumps or beds of the varieties Auratum or Rubrum, are very beautiful. They should be planted to 8 inches below the surface in light soils, or 4 to 5 inches below in heavy soils; in the latter case the bulbs should be surrounded by sand to facilitate drainage.

Lilium Regale or Myriophyllum—It is absolutely hardy and is excellent for forcing. It has been predicted that this will become the Easter Lily of the future, and being so hardy, may be grown at home. The flowers are white, slightly suffused with pink on the outer edges, with a beautiful shade of canary yellow at the center, and extending part way up the trumpet. It is delightfully perfumed, reminding one of the Jasmine, and lacking the heavy, oppressive odor of most lilies. Blooms out-of-doors early in July. Thrives in any good soil not too wet. Each, 25c. Per doz....

Auratum (Gold-Banded Lily)—A magnificent sort producing large broad creamy white flowers spotted with maroon and having a broad band of gold extending the length of each petal. Large size bulbs. Each, 25c. Per doz. \$2

Speciosum Rubrum-A magnificent sort. Color blush

The book "Gladiolus," by F. F. Rockwell, is recommended as the best brief guide on gladiolus growing. It tells how to plant, fertilize and cultivate; how to grow from seed or bulblets; how to harvest and cure; how to handle for cut flowers, and every other detail needed for success with this popular flower. See page 95.

FERTIL-POTTED ROSES

A PRIVILEGED PLANT

ROSES ARE LIVING THINGS REQUIRING SPECIAL TREATMENT

In the past a great loss has been suffered in the growing of roses, due to improper handling of plants from the time of digging to the actual planting of them. This has been overcome by the introduction of Fertil-Potted Roses.

Fertil-Potted Roses are 2-year-old field grown budded roses that have been selected from thousands of acres of the world's finest Hardy Roses.

Fertil-Potted Roses—have never been in a greenhouse, but are dug in the field, the roots being pressed into a block of peat moss which contains sufficient moisture and fertilizers to insure its growth.

Fertil-Potted Roses suffer no setbacks from either transplanting, delays in transit or waiting for favorable weather conditions to plant, but are actually growing all the time.

Fertil-Potted Roses are pruned by experts to blossom more quickly, with larger and more beautiful flowers.

Complete planting instructions on each Rose.

HOW TO GROW ROSES

Situation—Good roses may be grown in any open, sunny position, if sheltered from north winds, and clear of all roots of trees and shrubs.

Planting—The soil should be rich, and carefully prepared to a depth of at least 18 inches. The most satisfactory fertilizer to use is well-rotted animal manure, of which a liberal quantity may be thoroughly mixed with the soil. Ground bone meal, at the rate of a trowelful for each plant, may also be added at the time of planting.

Plant Hybrid Tea Roses 18 to 24 inches apart and Hybrid Perpetuals 2½ to 3 feet apart. All budded roses should be planted so that the crown from which the shoots arise is 1 inch beneath the surface of the bed.

Winter Protection—In this latitude we have found that the most satisfactory protection is to draw up a mound of soil from 8 to 10 inches high around the base of the plant, then covering the entire bed after the ground begins to freeze with any loose material, such as straw or *peat moss.

Climbing or Trellis Roses—Planted around verandas or porches they are especially desirable. Other choice locations are for training over summer houses, pergolas, along fences and the rose walk. Climbing roses should be planted from 3 to 8 feet apart, depending upon how dense a covering is desired. Little, if any, prunings should be done. Branches that grow in long shoots, many times 15 to 20 feet or more, should be carefully trained and tied to trellis or support.

For complete description of Peat Moss, see page 79.



Talisman is the most vividly colored rose ever introduced and exceptionally easy to grow. It is a combination of yellow and copper suffused with pink in the bud. Its foliage is very fine and vigorous, untroubled by disease, and the plant grows rapidly and blooms with exceptional freedom. The flowers have much substance and never lose their striking color entirely, although they are lighter in unfavorable weather. Each...\$1.25

Rev. F. Page-Roberts (R. B. Cant & Sons, 1921)—Copper red buds of great length, opening to golden yellow blooms, stained outside with red, fully double, and very large; fragrant, strong, branching plant with healthy foliage. Each.\$1.25

NEW HARDY CLIMBING ROSE

Mme. Gregoire Staechelin (Pedro Dot, Spain, 1927)—Buds long-pointed; very large, moderately fragrant flowers of delicate pink, with curled petals stained crimson outside, borne on long, strong stems. Foliage dark green, disease resistant. The plant is extremely vigorous, growing 13 to 14 feet in a season; abundant bloomer.

Mme. Gregoire Staechelin has just been awarded the John Cook Medal for the most outstanding climber, also the French Bagatelle Medal (1927), the highest international recognition that a Rose can receive. Each..........\$1.50

Midseason,

Betty Uprichard—One of those delightfully contrastive types; the outside a blend of deep toned carmine with coppery orange; the interior a delicate salmon-pink. Strong garden variety, sweetly fragrant.

Columbia—Lively, bright pink, sweetly scented flowers of exquisite shape and strong stiff petals, deepening in color as they expand. Free-flowering, good growths and healthy foliage.

Duchess of Wellington—A vigorous grower with long, saffron-yellow buds opening to very large, light yellow flowers.

Etoile de France—Vivid crimson flowers, with full, rounded centers of bright cerise, fragrant and long lasting, strong, free-blooming plants with stiff stems and good foliage.

Hadley—A rich crimson-red flower with velvety texture, lovely form and perfume.

Kalserin Augusta Victoria—Well formed creamy buds which develop slowly to blooms of perfect form, snowy white with a slight tint of lemon at center. Fragrant.

Lady Hillingdon—Slender pointed buds of deep saffronyellow. Fragrant.

Los Angeles—Luminous flame-pink, toned coral, shaded translucent gold at base of petals.

Mme Butterfly—Brilliant pink, suffused apricot and gold.
Mrs. Aaron Ward—Delightful little buds of golden buff,
opening to fully double, attractively shaped flowers.

Mrs. Henry Morse—A bright flower of two tones of pink, with an underlying yellow glow; flowers large, full and very high-centered, moderately fragrant.

Radiance—An ideal bedding rose of American origin that continues to produce its large flowers throughout the most unfavorable hot summer weather when frequently many other varieties fail; in color a brilliant carmine-pink, with salmon-pink and yellow shadings at the base of the petals; truly a rose for every garden.

Red Radiance—A counterpart of Radiance from which it is a "sport," possessing all the good traits of that valuable variety but differing in color which is a bright cerise-red.

FERTIL-POTTED ROSES

Packed as Per Illustration

See descriptive matter top of page 65.



Souvenir de Claudius Pernet—Color, a most striking sunflower-yellow, deeper in the center without any color blending and which is retained without fading even in the warmest weather.

Souvenir de Georges Pernet—A strong, vigorous grower and free bloomer. The flowers are large; globular in form; color, Orient red shading to a cochineal-carmine at the end of the petals, the whole being suffused with a golden sheen.

Price-Any of the above Fertil-Potted Roses, each, \$1.00; per dozen, \$10.00.

HARDY CLIMBING ROSES

American Pillar (Dr. W. Van Fleet, 1902)—Fairly large, single flowers of brilliant crimson-pink, with large white centers and golden yellow stamens. Blooms profusely in tremendous clusters on plants of astonishing vigor. Late. Each..........75c

Climbing American Beauty—Brilliant carmine flowers; fragrant, blooms early.

Dorothy Perkins—Pure salmon-pink. Late. Each....75c
Dr. Van Fleet—Rich flesh-pink; exquisitely shaped buds.

Mary Wallace-Rose-pink, salmon base. Early.

Paul's Scarlet Climber-Vivid scarlet. Early.

Primrose (Barbier & Co., 1929)—Large, double flowers of soft, rich primrose yellow, borne in clusters of 4 to 5 on an extremely vigorous and hardy plant, with marvelously beautiful foliage, midseason.

Silver Moon—Pure white, foliage perfect; midseason.

Price-Any of the above, except where noted, each, \$1.00; per dozen, \$10.00.

HYBRID PERPETUAL ROSES

The Hybrid Perpetuals are receiving the attention of the best hybridizers of the world who are producing new varieties more refined than the older "June Roses," besides being fairly recurrent. This hardy class of roses is rapidly coming back into fashion.

Frau Karl Druschki—Best white, blooms freely and continuously.

General Jacqueminot—Flowers bright crimson, deeply fragrant, if fertilized well will bloom the second time.

Paul Neyron—Dark rose, blooms of immense size, very double and remarkably fragrant.

Price-Any of the above, each .75c; per dozen, \$7.50.

SHRUB ROSES

The roses listed in this group are of a valuable nature. They can be used in permanent plantings, such as hedges, in the shrubbery borders, or as a specimen shrub about the lawn or graden. They are very hardy and vigorous, needing but little care; simply thin out the old wood every three or four years.

Hugonis—A remarkable and very valuable briar rose brought in from China. Grows and spreads quickly to as much as 6 feet at maturity. Blooms extravagantly in May, full length of last year's shoots. Flowers single, ranging from deep gold to canary, with conspicuous stamen tufts. Dependably hardy and blooms best when planted in poor soil with a liberal quantity of coal ashes added.

Harrison's Yellow (Harrison, 1830)—Semi-double bright yellow flowers covering the big bushes early in the season. Very vigorous and hardy, with perfect healthy foliage, sweetly fragrant.

F. J. Grootendorst—Small fringed flowers of bright red, produced in large clusters freely throughout the whole growing season.

Pink Grootendorst—Clusters of small, fringed, clear light shell pink blooms during the whole flowering season.

Price-Any of the above, each, \$1.00; per dozen, \$10.00.

FERTIL-POTTED FLOWERING SHRUBS

Double Pink Flowering Almond (Prunus Japonica Fl. Pl.)—A beautiful dwarf shrub, producing its double showy flowers early in May, before the leaves appear. Each.....\$1.00

French Lilac—Four colors. Each......\$1.00

All our seeds are tested for your protection.

HARDY PERENNIAL AND ROCK PLANTS

Plant orders will be forwarded by express, purchaser paying charges. Small orders may be forwarded by parcel post, but if wanted sent this way, please add 10 per cent of the value of the plants to cover postage and packing. All our perennials are strong field-grown plants and can be shipped during late March, April and early May and again in September and October.

ALYSSUM	GAILLARDIA (Blanket Flower)
Saxatile Compactum (Basket of Gold)—Showy, bright yellow flowers, hardy perennials; excellent for rock work; 1 foot. Each, 25c. Per dozen\$2.50	Grandiflora—One of the showlest hardy plants, growing about 2 feet high and succeeding in any soil in a sunny position. The center is dark red-brown, while the petals are marked with rings of brilliant crimson, orange and vermilion. Each,
AQUILEGIA (Columbine)	20c. Per dozen\$2.00
This is one of the best perennials for borders or edges of shrubbery. They do best in partial shade.	Gypsophila Repens—Trailing plant; white and pink flowers for the rock or wall garden. Each, 25c. Per dozen \$2.50
Mrs. Scott Elliott's Long-Spurred Hybrids—Each 35c. Per dozen	**Heuchera Sanguinea (Coral Bells)—Flowers bright crimson on 12 to 18-inch stems in June to September. Excellent for the rock garden. Each, 35c. Per dozen\$3.50
ARABIS (Rock Cress)	IBERIS (Hardy Candytuft)
**Alpina—Low growing for the rockery, small white terminal racemes; 6 inches. April, May. Each, 25c. Per dozen\$2.50	A low evergreen, shrubby plant. Very valuable for dry sunny places. Effective in clumps, drooping over rocks or edging the border. Hardy perennial.
Arenaria Verna (Sandwort)—A prostrate growing plant, creeping low over the ground and between cracks in stones.	**Sempervirens—A profuse, white blooming, hardy perennial, coming in flower early in the spring. 1 foot. Each, 25c. Per dozen\$2.50
Excellent for the rock garden. Each, 35c. Per dozen\$3.50	PHLOX SUBULATA
Aubrietia Mixed Colors—Dwarf growing perennial plants for the rock garden or dry rock wall; combines well with Arabis and yellow Alyssum. Each, 25c. Per dozen\$2.50	An early spring-flowering type with moss-like evergreen foliage which during the flowering season, in April and May, is hidder under masses of bloom. An excellent plant for the rockery.
CAMPANULA	Alba—Pure white. Each, 35c. Per dozen\$3.50
■ Muralis—Very dwarf, blue purple flowers, June. Fine for wall or rock garden. Each, 30c. Per dozen\$3.00	Rosea—Rose-pink. Each, 35c. Per dozen\$3.50 Lilacina—Pale blue. Each, 35c. Per dozen\$3.50
Garganica—A gem for the rock garden. Forms a low	PINKS (Hardy Garden)
spreading tuft which in June is covered with starry light blue flowers having a white eye. Each, 35c. Per dozen\$3.50	Dianthus Plumarius—(Hardy Garden or Pheasant Eye Pinks). These "Clove Pinks", so much used for edgings of old-
CERASTIUM (Snow-in-Summer)	fashioned gardens, bloom most profusely during May and June. They grow about a foot high and bear double flowers resembling small carnations. We have white, pink and red.
Silver foliage, white flowers. Fine for rocks. 6 inches. Each, 25c. Per dozen\$2.50	Each, 25c. Per dozen\$2.50
Cheiranthus Allioni (Siberian Wallflower)—A beautiful rock plant, dazzling orange flowers. 12 inches. Each, 25c. Per dozen\$2.50	■ Plumbago Larpentae—Low-growing plants for the rock garden with leathery, small, heart-shaped leaves of bronzy green color. The flowers are a deep peacock blue, borne in small clusters just above the foliage, during late summer and fall. Each, 25c. Per dozen\$2.50
COREOPSIS LANCEOLATA	Polyanthus Veris (Bunch Primrose)—Shades of lilac,
Bright golden-yellow, blooming in profusion all summer. Each, 20c. Per dozen\$2.00	purple and violet, as well as buff, orange, salmon and rich reds of vigorous growth. Each, 35c. Per dozen\$3.50
DELPHINIUM (Larkspur)	SEDUM (Stone Crop)
These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment.	■ Acre—(Golden Moss). A dwarf grower forming a thick, green, moss-like foliage, hidden by yellow flowers in June. 2-3 inches. Each, 25c. Per dozen\$2.50 ■ Sarmentosum—Excellent dwarf variety for the rockery. The best Sedum for filling seams between rocks in the wall garden; rapid grower. Each, 30c. Per dozen\$3.00
Delphinium Belladonna—The freest and most continuous blooming of all. Clear turquoise-blue. Each, 25c.	Sieboldi—Round succulent glaucous foliage; bright pink

SHASTA DAISY white flowers, in blo

flowers in September. Each, 30c. Per dozen.....\$3.00

Large, snowy-white flowers, in bloom continuously throughout the summer and fall. Each, 20c. Per dozen...\$2.00

SWEET WILLIAM

Dianthus Barbatus—These old-fashioned favorites are prized border plants. There is a great variety of rich colors, and the flowers are very fragrant. Each, 20c. Per dozen \$2.00

Tunica Saxifraga—A pretty tufted plant with light pink flowers, produced all summer, about six inches high. Excellent for the rockery. Each 25c. Per dozen......\$2.50

small crimson flowers during June and July. Each, 25c.
Per dozen.....\$2.50

Per dozen.....\$2.50

Delphinium Bellamosa—Dark blue, white center, spikes three to four feet tall, vigorous; free blooming. Each,

25c. Per dozen.....\$2.50

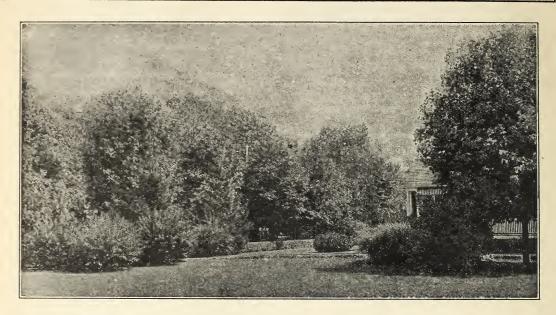
Delphinium Hybrids—A beautiful collection of wonder-

colors. Each, 30c. Per dozen.....\$3.00

Dianthus Deltoides (Maiden Pink)—A beautiful little prostrate plant with narrow leaves and bearing a profusion of

fully developed plants of brilliant and showy flowers. Mixed

SHRUBS



There is nothing that will add more beauty or lend more enchantment to grounds and lawns than well selected judiciously grouped shrubs, and considering their moderate cost, they should be used more largely.

ALTHEA (Rose of Sharon) (Hibiscus Syriacus)

One of the old reliable shrubs. Effective when planted as a hedge.

Jeanne D'Arc-Double white.

Rubis—Single red.

Totus Albus-Single white.

Aulissima-Purple. Shrub form.

Boule De Feu-Double red. Shrub form.

Monstrous—Double, red. 2 to 3 feet. Each, 40c. 3 for................\$1.10

BARBERRY (Berberis)

Japanese (Thunbergi)—Of all the Barberries in cultivation this one is probably the best known and most planted. Grows low and dense, making it very adaptable for planting along walks and borders where a rank-growing shrub would be offensive. Every driveway can be beautified greatly by planting Barberry and we do not hestitate to recommend it. 18 to 24 inches. Each, 30c. Per dozen, \$3.25. 12 to 18 inches. Each, 20c. Per dozen. \$2.20.

RED-LEAVED JAPANESE

Similar to the Green Leaf Japanese Barberry, except the foliage of this new variety is of a rich bronze, similar to the richest Red-Leaved Japanese Maple. Color remains brilliant and gorgeous throughout the summer. Each, 35c. 3 for \$1.00

Buddleya (Butterfly Shrub or Summer Lilac)—Flowers continuously all season. The flowers are composed of many little blossoms in the shape and color of lilacs. Each, 35c. 3 for \$\\$\\$\\$\\$\$1.00

Corchorus (Kerris)—Globe Flower or Japanese Rose. Japonica. Flowers bright yellow; large and showy. 2 to 3 feet. Each, 60c. 3 for.....\$1.60

CYDONIA (Fire Bush)

DEUTZIA

An elegant species of strong, erect-growing shrubs. Especially prized for the beautiful clusters of blossoms in May.

Lemoinei—Spreading shrub to 3 feet in height. Its pure white flowers appear in broad panicles. A very desirable shrub, more vigorous and with more showy flowers than some of the other forms. Excellent for forcing. Very hardy. 18 to 24 inches. Each, 40c. 3 for. \$1.10

SPINDLE TREE (Euonymus)

GOLDEN BELL (Forsythia)

Weeping (Suspensa)—5 feet. Branches often drooping on ground and taking root. 2 to 3 feet. Each, 40c. 3 for..\$1.00

FRENCH PUSSY WILLOW

(Salix Caprae)

Plant one or more of them this fall. Cut the ends of the branches in January or February. Place them indoors in a vase of water. Watch them unfold their large catkins of silvery pink, from 1 to 2 inches long. They will repay you many times their cost in pleasure. 3 to 4 feet. Each, 60c; 3 for \$1.25.

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED.

For planning the use of Shrubs, we recommend the book "Shrubs", described on page 95.

SHRUBS—Cont'd

HONEYSUCKLE, Upright

Valuable for handsome flowers and showy fruits. The following varieties are erect, upright growth. The climbing sorts will be found under the head of Climbing Plants.

Morrowi—A fine variety from Japan, valuable for its handsome fruit. 2 to 3 feet. Each, 45c. 3 for.......\$1.25

Red Tartarian—Pink flowers which contrast beautifully with the foliage. 2 to 3 feet. Each 45c. 3 for......\$1.25

White Tartarian—Forms a high bush of creamy-white fragrant flowers in May and June. 2 to 3 feet. Each, 45c.

HYDRANGEAS

HYPERICUM (St. John's Wort)

Shrubs and herbs, with mostly yellow flowers. The form is compact and rounded with somewhat persistent leaves.

H. Moserianum—A novelty of decided merit on account of its large, glistening golden-yellow flowers, produced freely from mid-summer until hard frost. It is quite dwarf in habit. 12 to 18 inches. Each, 55c. 3 for.....\$1.50

KOLKWITZIA AMABILIS (Beautybush)

(Beautybush)

Kolkwitzia Amabilis (Beautybush)—A charming new shrub which increases our debt to China. Discovered among the high peaks of Hupeh's mountains, its progeny in America is proving likewise hardy in New England's severe climate. The attractively leaved bush attains about 6 feet, the center upright, the outer branches gracefully arching. Has a general resemblance to both Weigela and Honeysuckle, the beautiful trumpet-shaped flowers appearing in great profusion during June, in pairs which cluster closely into cymes of about twenty-five. Flowers are bell-shaped and somewhat lipped, pale pink with orange veins in the throat, the buds being much darker. There are not many salable plants available, but we can supply a limited number. Each\$1.00

LILAC (Syringa)

Lilacs are among the most popular and ornamental of the flowering shrubs.

Persian Lilac—A very hardy sort, native of Persia Bright purple flowers. 2 to 3 feet. Each, 75c. 3 for....\$2 Bright purple flowers. 2 to 3 feet. Each, 75c. 3 for...\$2.00
Common (Syringa Vulgaris)—The old favorite, and one of the best. Each, 50c. 3 for...\$1.40
Common White (S. Vulgaris Alba)—Flowers white, fragrant, beautiful. Each, 50c. 3 for...\$1.40
Charles X—A strong, rapid growing variety, with large, shining leaves. Trusses rather loose; large, reddish-purple. Each, \$1.00. 2 for...\$1.75
Japonica—An elegant Japanese species, eventually forming a good sized tree, flowers creamy-white in great panicles a month later than other sorts. Each, \$1.00. 2 for...\$1.75
Josikaea (Hungarian Lilac)—A distinct species of stout erect growth with dark shining leaves and purple flowers which are produced later in June. Each, \$1.00. 2 for...\$1.75
Mme. Marie Lemoine—The finest double white Lilac

Mme. Marie Lemoine—The finest double white Lilac yet introduced. The individual flowers, which resemble miniature Tuberoses, as well as the truss, are of immense size, deliciously scented; fine for cutting. Each, \$1.00. 2 for...\$1.75

President Grevy—Magnificent panicles of large double blue flowers. Each, \$1.00. 2 for...\$1.75

PHILADELPHUS (Mock Orange)

40c. 3 for ...



SNOWBALL (Viburnum)

SNOWBERRY

SPIREA-The Most Popular Shrub

There is no more dependable shrub than Spirea. Its graceful foliage and growth and the beautiful blossoms are a delight the season through. A selection of varieties, planted in masses or rows will assure continuous bloom to the end of summer. The early fall frosts touch the leaves with scarlet.

Van Houttel—One of the most beautiful or perhaps the most beautiful of early Spireas. Covered with white flowers in May. 2 to 3 feet; Each, 30c. 3 to 4 feet; Each, 40c.

Billardi—A shrub that grows to 6 feet in height with oblong leaves. Flowers are bright pink. 2 to 3 feet. Each, 40c. 3 for.

40c. 3 for \$1.10

Anthony Waterer—A very free-flowering, compact, dwarf shrub, with bright crimson flowers in dense corymbs. 12 to 18 inches. Each, 40c. 3 for \$12 to 18 inches the pride of the Southland. It is spreading in growth with arching slender branches that are a perfect mass of minute flowers followed with exceptionally delicate green follage. For edging purposes it has few equals and we recommend it highly. 2 to 3 feet. Each, 40c. 3 for \$1.10

SHRUBS-Cont'd

TAMARIX

These plants are very beautiful all the year, in winter for their coloring of the bark and in summer for the light green, feathery foliage and large, loose panicles of purplish flowers.

WEIGELA (Diervilla)

An ornamental and popular class of graceful shrubs. The beautiful trumpet-shaped flowers appear in May and June in such profusion as to almost completely hide the foliage. Is very desirable for the border and for grouping. They vary in color from pure The following are choice varieties:

Rosea—A choice, vigorous sort, which yields an immense crop of deep pink, trumpet-like flowers in June, and bears a scattering of blossoms through the rest of the season. 2 to 3 feet. Each, 40c. 3 for. \$1.10

Eva Rathke—The flowers are a deep carmine-red, erect growing. A most profuse bloomer in spring and again in autumn. 2 to 3 feet. Each, 60c. 3 for\$1\$1.50

HEDGE PLANTS

California Privet-A vigorous, hardy variety of fine habit and dark green foliage which is rarely attacked by insects and keeps its green color mostly unchanged until late fall. It succeeds well under adverse conditions and is ideal for planting as ornamental hedges.

Planting—Plant in double rows, the two rows being about 8 inches apart. The plants should be set 12 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

AMOOR RIVER PRIVET

Very hardy, quick growth, easily trained to a dense Hedge. 12 to 18 inches. Per 100, \$5.50. 2 feet. Per 100,\$8.50

FRUIT TREES

Select thrifty trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to thrive; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not

prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the trees therein, carefully pack the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air. We do not guarantee to replace plants or trees.

SENT BY EXPRESS OR FREIGHT AT EXPENSE OF PURCHASER.

APPLES

STANDARD

We can furnish all varieties usually catalogued, but the following list comprises the most desirable sorts:

5 to 7 feet, 60c, each; \$6.75 per dozen.

SUMMER VARIETIES

Early Harvest—Pale yellow, fine flavor, August. Red Astrachan—Large, crimson, juicy, July. Yellow Transparent-Pale yellow, good quality.

AUTUMN VARIETIES

Delicious-Large, dark red, juicy. Fall Pippin—Very large, yellow, rich, aromatic. Maiden's Blush—Large, beautiful, blush cheek.

WINTER VARIETIES

Baldwin-Large, dark red, productive. Ben Davis—Large, handsome, striped; good quality.

Grimes Golden—Medium to large, skin golden yellow,
flesh crisp, tender, juicy, long keeper.

Jonathan—Medium, red and yellow, flesh tender, juicy

and rich. Northern Spy—Large, yellow, shaded red. Rome Beauty—Large, yellow, shaded red, tender. Wine Sap—Medium, deep red, rich, sub-acid.

CRAB APPLES

5 to 7 feet, 75c each; \$8.25 per dozen.

Hyslop-Deep crimson, very popular on account of its large size, beauty and hardiness.

PEARS

STANDARD AND DWARF

5 to 7 feet, 80c each; \$8.75 per dozen.

Bartlett—Large, clear, yellow, juicy, August.
Flemish Beauty—Fruit large, pale yellow and sweet.
September and October.

Kieffer-Large, rich color and good quality. Seckel—Small, yellowish-brown, one of the best.

QUINCES

4 to 6 feet, 80c each; \$8.75 per dozen.

Champion-Fruit bright yellow, flesh very fragrant and tender, October.

MULBERRIES

4 to 5 feet, \$1.00 each; \$9.50 per dozen.

Downing's Everbearing—One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits, hardy, fruits about three months.

PEACHES

4 to 5 feet, 50c each; \$5.50 per dozen.

Champion—Creamy-white with red cheeks, freestone, excellent quality, early in August.

Crawford's Early—Large, yellow, of good quality, freestone,

early in September.

Crawford's Late—Large, yellow with red cheek, freestone,

last of September.

last of September.

Elberta—Large, yellow with red cheek, flesh yellow, firm, juicy, of high quality, very prolific, September.

Heath Cling—Large, flesh white, juicy and melting, October.
Old Mixon Free—Large, yellow with red cheek, September.

CHERRIES

HEART AND BIGARREAU (Sweet) 4 to 6 feet, 90c each; \$9.00 per dozen.

Black Tartarian—Very large, purplish-black, juicy, rich, excellent, productive, last of June.

Governor Wood—Large, light red, juicy, rich, delicious.

Tree healthy and productive, June.

Yellow Spanish—Large, pale yellow with light red cheek,

late June.

DUKE AND MORELLO (Sour) 4 to 6 feet, 90c each; \$9.00 per dozen.

Dychouse—A very early and sure bearer, ripens a week before Early Richmond, fine quality, June. Early Richmond—Medium, dark red, fine quality. English Morello—Dark red, rich, acid, juicy and good.

STANDARD 5 to 7 feet, 90c each; \$9.00 per dozen.

Abundance-Large, yellow with heavy bloom, good quality, very prolific.

Burbank—The largest and best variety, color red, excellent

Burbank—The largest and best variety, color red, excellent quality, hardy and vigorous grower.

Damson—Small, oval fruit, purple, hardy and productive.

Lombard—Medium, red, juiey, hardy and productive.

Red June—Large, red, fine quality, strong, vigorous grower.

Finest extra early plum.

Shipper's Pride—Large, purple, fine, juicy and sweet.

Yellow Egg—A beautiful yellow, egg-shaped plum of large size, flesh yellow, late August.

DISTANCES FOR PLANTING. Apples, 30 to 40 ft. Pears, 18 to 20 ft. Quinces, 10 to 12 ft. Peaches, 16 to 18 ft. Cherries, sweet, 18 to 20 ft. Cherries, sour, 15 to 18 ft. Plums, 16 to 20 ft.

ALL PRICES IN THIS CATALOGUE SUBJECT TO CHANGE WITHOUT NOTICE. WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED.

Grape Vines, Small Fruits, Asparagus, Etc.

We do not guarantee to replace Plants, Shrubs or Trees

GRAPE VINES ALL TWO-YEAR-OLD SELECTED STOCK

BLACK OR PURPLE GRAPES

Campbell's Early—Bunch and berry large, glossy, black, sweet and juicy; fine quality. Each, 25c. Per dozen....\$2.50 Moore's Early—Ripens ten days earlier than Concord; bunch medium, berry large, round and black, vine exceedingly hardy. Each, 20c. Per dozen.......\$2.00 **Concord—Large, black grape, hardy and productive; juicy and sweet. Each, 15c. Per dozen...........\$1.50 juicy and sweet. Each, 19c. 16t augustic.

Worden—A black grape that resembles Concord, but of higher quality and ripens a week to ten days earlier. Each,

20c. Per dozen. \$2.00

RED GRAPES 25c each; \$2.50 per dozen.

Agawam-Deep red or maroon. Large, meaty berries borne in large bunches.

Brighton-Bunch large, berries red, round, excellent flavor; one of the earliest.

Catawba-Berries large, round, when ripe a dark copper color; sweet, rich, musky flavor.

Delaware-Small, light red, thin skin, very juicy, sweet, fine flavor.

Salem--Bunch large and heavy; berries round, red and an inch thick; flesh tender; flavor sweet.

WHITE OR YELLOW GRAPES

**Niagara—Vine remarkably hardy and strong grower; bunches very large and compact; berries large, greenish white, slightly ambered in the sun; skin thin but tough, and does not crack. Each, 20c. Per dozen..........\$2

Varieties marked with a ** are best for arbors.

BLACKBERRIES

60c per dozen; \$4.25 per 100.

Early Harvest-Very prolific, choice variety.

Blower-Large, luscious berries, rich in quality and quantity. Eldorado—Large fruit, borne in clusters and ripen well together, fine quality, good keeper.

DEWBERRY

75c per dozen; \$5.00 per 100.

Lucretia—One of the low-growing, trailing blackberries. In earliness, size and quality it equals any of the tall-growing sorts. It has proven highly satisfactory wherever tried, and many say it is the best of the blackberry family.

RASPBERRIES

65c per dozen; \$4.50 per 100 (except where noted).

St. Regis—Fruit commences to ripen with the earliest and continuing on young canes until October, many quarts often being picked after the first snowfall. Berries bright crimson, large size, rich, sugary, with full raspberry flavor. Flesh firm and meaty, a good shipper. Wonderfully prolific. Canes stocky, of strong growth, with abundance of dark green leathery foliage.

Cardinal—Produces a fine quality of dark red or almost purple berries through a long season.

Cumberland-The largest black cap; a healthy, vigorous grower; very productive and of finest quality.

Cuthbert—Large, firm, deep rich crimson, of excellent quality, tall, strong, vigorous, perfectly hardy and very productive. Ripens medium to late.

*CHRRANTS

25c each; \$2.50 per dozen.

Cherry-Fruit large, bunch small, deep red, acid.

Fay's Prolific-Extra large stems and berries, color rich red, fine quality, very productive.

Pomona-Bright red, extra fine quality and enormously productive; strong, vigorous grower.

*GOOSEBERRIES

25c each; \$2.50 per dozen.

Downings-Very large and fine quality.

Houghton-Medium size, very productive.

Smith's Improved-Large, thin skin, best for table use.

*Note—Due to Federal Quarantine No. 63, we do not accept orders for Currants or Gooseberries to be shipped or delivered out of the State of Ohio.

SPRING STRAWBERRIES

25 plants 50 cents; 100 plants, \$1.25. 1000 plants of one variety, \$7.00.

Senator Dunlap—The demand for this variety has been increasing steadily, as it has an unusually long fruiting season. It bears immense quantities of large, handsome, rich, fine-flavored dark red berries.

Premier—Also called Howard, is a little lighter than Dunlap and of large size and good quality. The plants are healthy, vigorous and productive and have a long bearing season. It is frost resistant in both bud and blossom.

Lady Corneille—This wonderful strawberry has more good qualities than ever before combined in any one berry. It is the healthiest, thriftiest, best growing plant with clean foliage, absolutely free of rust or leaf spot; plants large, strong, with large roots that grow deep in the ground. Thrives in both clay and loamy soil. Ripens same time as Senator Dunlap. Berries large, the decay and of the best quality. rich, glossy red, slightly long and of the best quality.

Aroma—One of the finest for long distance shipping. The large berries are bright red to the center. Of conical shape, with prominent yellow seeds that help to make them very attractive on market. The Aroma has three outstanding points: Its large size, its very bright color and the very fragrant aroma.

FALL OR EVERBEARING STRAWBERRIES

Mastodon-The Mastodon which is a recent introduction Mastodon—The Mastodon which is a recent introduction is a fall bearing variety of great promise. Should give excellent results where water can be applied during dry weather and where special attention can be given to the plants. Per dozen, 56c. Per 100...........\$2.50

ASPARAGUS ROOTS

ASPARAGUS ROOTS

May be either planted in fall or spring. Dig up your ground deep, put plenty of well-rotted manure thoroughly mixed in the soil, throw out a bed about four to five inches deep, lay the plants in by spreading the roots out well and scatter the dirt over the plants about four inches, or the depth of the ground thrown out, firm the dirt well around the plants by patting it down with spade or shovel, then top dress the ground with about three inches of well-rotted manure, and scatter salt enough over the top of this to make the ground white enough to track a rabbit. The second year after planting you will be able to harvest enough asparagus for a good-sized family from a bed of about 200 plants. You should keep the crown of the asparagus cut regularly so it will produce from three and one-half to seven pounds of asparagus, and when planted in small beds, where it can be well mulched and cared for, will even do much better than this. It is necessary to start with good roots. It depends much more on the care taken of the plants and the plant food given them than it does the variety planted. Salt should be put on at the end of every season.

ASPARAGUS ROOTS-Two-vear-old

	Per	Per
	25	100
Washington (rust resistant)\$	0.60	\$2.00
Conover's Colossal	. 50	1.50
Palmetto	. 50	1.50
For descriptions of above varieties, see	page 4.	

If wanted by mail, add 10c per 25 plants or 15c per 100 for postage.

DISTANCES FOR PLANTING. Grapes, rows 10 to 16 feet apart, 7 to 10 feet in rows. Blackberries, 5 to 7 feet apart, 3 to 5 feet in rows. Currants, 4 feet apart each way. Gooseberries, 4 feet apart each way. Raspberries, rows 5 feet apart, 3 feet in rows. Strawberries, for field culture, rows 3 to $3\frac{1}{2}$ feet apart, 1 to $1\frac{1}{2}$ feet in rows; for Garden Culture, plant in beds 4 feet wide, 3 rows in each bed, plant 1 foot apart in rows.

SHADE AND ORNAMENTAL TREES

FOR LAWN, STREET AND FOREST PLANTING

ASH (Fraxinus)

EUROPEAN MOUNTAIN ASH

(Sorbus aucuparia) - Ornamental deciduous tree with beautiful foliage, which turns orange-red in the fall.

The fruits are showy and often remain all winter, if not eaten by the birds. Not particular as to soil. 6 to 8

CATALPA BUNGEI

(Umbrella)—Just the tree to be used for formal effects. Propagated on a stem of the Catalpa Speciosa. It makes a very unique, ornamental tree. Has a broad, dome-shaped head at the top of a long, straight stem. When the tree attains its full growth, the top is often 15 feet in diameter and not over 3 to 4 feet tall on top of a strong stem from 5 to 7 feet in height. An exceptionally hardy variety. 1-year heads. Each, \$1.25. 2-year heads. Each. heads. Each.....

ELM (Ulmus)

Elms are considered the best of all the street trees and are used in greater quantities than probably all other kinds or varieties combined. In planting Elms do not crowd them.

Moline—A new introduction. A beautiful tree for avenue planting. Very large leaves; very compact growth.

S to 10 feet. Each. \$2.00

S to 10 feet. Each. \$2.00

American (Americana)—Very valuable for park planting, for avenues and as a shade tree for lawns. One of the most majestic and graceful of our shade trees. Hardy, a rapid grower, resists drought well, and is long lived. 8 to 10 feet. Each. \$1.50

MAPLE (Acer)

Norway (Platanoides)—Large, handsome tree with a compact rounded head of spreading branches, attaining a height of 75 feet. The broad, deep green leaves cast a dense, refreshing shade. One of the best and most beautiful trees for the street, park, cemetery or lawn planting. 6 to 8 feet. Each....\$2

Schwedleri (Purple-Leaved Norway Maple)—One of the most beautiful of the shade trees. In early spring the young leaves are bright red, changing to purplish-green as they grow older. In autumn they are golden-yellow. The tree has round, compact and large leaves which cast a dense shade. 6 to 8 feet. Each.....

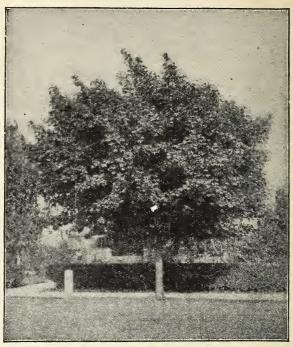
OAK (Quercus)

Coccinea (Scarlet Oak)—A beautiful tree with spreading branches that makes a conical shape. It is valued for its gorgeous autumn color, turning brilliant scarlet. Slow, but fine specimen tree. 6 to 8 feet. Each.......\$2.75

Palustris (Pin Oak)—Of all the Oaks this is preferred.
Perfectly symmetrical from the base branches up, foliage a shining green, leaves deeply cut and in fall of wondrous colors, a combination for beauty, symmetry and durability not found in any other tree. It is the easiest of the Oaks to transplant, more rapid of growth and may be used in any capacity, whether shade, specimen, avenue, cemetery or park tree. If one is a little patient the reward is commensurate. We are very partial to it and when a hardwood tree is wanted for any location we unhesitatingly recommend Pin Oak. 6 to 8 feet. Each...\$2.75

Excellent for landmarks. 8 to 10 leet. Sycamore. Plantanus Orientalis—(Oriental Plane.)
Very hardy and does well in moist places. Thrives in smoky cities, making it a good tree for city planting. 6 to 8 feet.

\$1.50.



Norway Maple

TULIP TREE

WEEPING TREES WEEPING CUT LEAF BIRCH

Birches not only form an interesting class of trees, but they are also beautiful and ornamental. They are especially desirable for park and other ornamental planting. The bark usually separates into thin, papery leaves. The foliage is rarely attacked by insects. Their graceful habit, slender and often pendulous branches, and their picturesque white trunks, make them conspicuous marks on any landscape. 6 to 8 feet. Each...\$2.50

WEEPING MULBERRY

(Alba, var. Tartarica Pendula)—We recommend this as one of the thriftiest, hardiest and most beautiful of the weeping trees, with slender, willowy branches that sweep the ground, forming a beautiful tent of green. 2-year heads. Each. \$2

WEEPING WILLOW

Golden Weeping (Elegantissima)—A strong and the most vigorous grower of all weeping willows. Used for planting in low places or on the banks of streams, springs, lakes or ponds, making a very beautiful effect. 6 to 8 feet. Each...\$1.00

Wisconsin Weeping (Dolorosa)—A weeping tree of rarely more than forty feet in height. The branches are long, slender and pendulous. Trees are quite hardy and will stand planting in the northern states. 6 to 8 feet. Each............\$1.25

For Shady Lawns Use Our "SHADY NOOK" Lawn Seed

(See Page 3)

CLIMBING AND TRAILING PLANTS

AMPELOPSIS

Veitchii—Japan Creeper. Boston Ivy. A rapid growing climber which clings to walls, fences, trees, stumps, etc., with great tenacity. The leaves overlap one another, forming a dense sheet of green in summer, which changes to crimson-scarlet in autumn. Strong 2-year old. Each, 40c. 3 for. \$1.00

CLEMATIS

Among the most popular of hardy perennials and not exceeded in beauty and effectiveness by any other class of climbers. They are excellent as a screen for fences, pillars, or trailing on walls or arbors, or on verandas. Very effective in masses of rock work and some are valuable for cultivation in pots. Clematis does best in deep, rich, sandy, loamy soil, well mulched with manure and the finest results are obtained in partial shade, where there is a liberal supply of water given at the roots.

Named Sorts—These include Jacmanni (large violet-purple), Henryli (large creamy-white), Madam Edw. Andre (large bright velvety red). Strong plants. Each..........\$1.00

Paniculata—A rapid luxuriant growing sort, bearing immense clusters of small double white flowers in greatest profusion in late summer. It is sweet seented and most desirable for verandas, fences, trellises, and grows from 20 to 30 ft. in a single season. Should be cut back to the ground each year. Each, 50c. 3 for...\$1

We send out strong, healthy roots of Clematis and cannot entertain any claims for non-success with these plants.

HONEYSUCKLE

(Lonicera)

Monthly Fragrant—Blooms all summer. Red and yellow, very fragrant flowers. Each, 50c. 3 for..........\$1.35

Japonica (var. Halliana)—A strong, vigorous, almost evergreen sort. Pure white flowers changing to yellow, very fragrant. Blooms abundantly from July to December, holds its leaves until January. Each, 35c. 3 for.......\$1.00

KUDZU VINE-Pueraria Thunbergiana or Jack and the Bean Stalk Vine

.....\$1.00

WISTERIA

Chinese Purple (Sinensis)—An elegant and rapid grow-ing climber, attaining a height of 20 feet in a season. Has hundreds of long, pendulous clusters of sweet-scented pale blue flowers in May, June and in autumn. Each, 50c. 3 for \$1.35

Chinese White-Similar to above. Pure white flowers: beautiful. Each, 50c. 3 for

ORNAMENTAL GRASSES

Price, all Varieties. Each, 25c. 5 for.....\$1.00 Erianthus Ravennae (Plume Grass)--Grows six to eight feet high and produces handsome plumes in fall.

Eulalia Gracillima (Japan Rush)—The most beautiful of all the Eulalias, with narrow, graceful feliage entirely green, except that the mid-rib is of a silver sheen. Perfectly hardy.

Eulalia Japonica Variegata-Leaves striped white and green longitudinally.

Eulalia Zebrina (Zebra Grass)—A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light yellow alternating.

The dried blooms of all the Eulalia make beautiful winter ornaments.

WATER-LILIES AND AQUATIC PLANTS

Place your order for these plants early and we will reserve them until the proper planting season

You have never known all the delights of a garden, if you have never known the real pleasure that comes from a pool of waterlilies.

Hardy water-lilies thrive in pools and small ponds, no trouble to care for them. A box one foot square and one foot deep is as small as you can have for the plants to do well.

The soil for water-lilies is preferably a mixture of two-thirds rich garden soil and one-third well rotted cattle manure.

Most water-lilies thrive at any depth from 4 to 30 inches.

PINK VARIETIES Eugenia de Land-Deep rose-pink; narrow petals.\$1.25 Each....

YELLOW VARIETIES

Marliacea Chromatella—Color of the bloom is bright yellow; leaves green mottled brown. Each............\$1.50

WHITE VARIETIES\$1.00 Gladstone-The best of all white lilies. Each.....\$1.50 RED VARIETIES



Glorioso

SUBMERGED PLANTS

INSECTICIDES AND FUNGICIDES

ACME

Insecticides prefixed by (**) cannot be sent by mail.

All prices subject to market changes.

■ACME ALL ROUND SPRAY—Flowers, vines, shrubs, roses, vegetables, need pro-tection same as commercial crops. All Round Spray contains the three leading remedies used by all large growers, Arsenate of Lead, Nicotine Sulphate and Bordeaux Mixture.

Perfect protection for the small user is assured by complete directions in form of

Mixture 2 results with one spray.

Controls Insects, combats Blight, stimulates Foliage.

Easy to apply—wet or dry—For dusting, apply lightly, as it comes in the package.

In spraying apples, grapes, musk melons, potatoes, squash and tomatoes, use $9\frac{1}{2}$ level tablespoonfuls to 1 gallon of water.

On pears, sour cherries, egg plant and peppers, use 7 level tablespoonfuls to 1 gallon of water. 1 lb., 50c. 4 lbs.....\$1.50

ANSECT (Rose Bug Destroyer)—Highly effective when used on Rose Bugs, many hard-bodied insects, Red Spider, Mealy Bug and other garden pests. Dilute with from 30 to 50 parts water. Thorough spraying is essential. 1-pint cans....75c

By mail or express at customer's expense.



"Kills Ants in the Nest"



011154

New Method "Gets" Them at Their Source-Safe, Permanent, Effective

The Antrol system is adapted to any size house or garden, and quickly destroys all species of sweet-eating ants. It is composed of small glass containers partially filled with special syrup and placed about the outside edges of the house or along ant "trails" in the garden. The ants smell the syrup, eat it, and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed.

The complete system should cover

The complete system should cover every fifteen feet around the outside of the house or ant "trails" in the garden. Once installed, permanent, effective, and safe protection is insured from these annoying pests. Prices—Antrol sets containing four containers and one 4-oz. bottle of syrup, 95c. Antrol sets containing 9 containers and one 6-oz. bottle of syrup, \$1.60. Antrol extra containers (each), 15c. Antrol syrup, 4-oz. bottles, 45c; 6-oz. bottles, 60c; pints, 95c; gallons......\$3.75

■ARSENATE OF LEAD—One of the best and most effective of poisonous insecticides for leaf-eating insects, and more especially adapted to trees and shrubs, as it adheres to the foliage better. It is not so liable to be washed off by rains and does not burn.

Dry-1/2-1b., 20c; 1 lb., 30c; 4 lbs., 80c. 12 lbs....\$2.25

BLACK LEAF 40 (40% Nicotine Sulphate)—Kills by contact and fumes. Highly recommended by Experiment Stations as a control for Aphis, Thrip, Leaf-hopper and other insects of like nature. Can also be used for delousing poultry by painting Black Leaf 40 (full strength) on the top-sides of the roosts before fowls perch for the night. 1-oz. bottle, 35c; 5-oz. bottle, \$1.00; 1-lb. bottle, \$2.25; 2-lb. tin, \$3.35; 5-lb. tin, \$6.25; 10-lb, tin.\$10.75

**BORDEAUX MIXTURE-For blight, mildew and all fungous diseases. Can be used alone or in connection with Paris Green or Arsenate of Lead. ½-lb., 20c; 1 lb., 30c; 4 lbs., 80c. 12 lbs. \$2.25



(Cyanogas G)—For greenhouse fumigation. 5 lbs....\$3.00

CUTWORM KILLER-See "Snarol".



Effective against cucumber and melon beetles, cabbage worms, rose slugs, aphis, leafhoppers and most other plant insects including cutworms and Mexican Bean Beetle.

Non-Poisonous--Evergreen is harmless to man, live stock, birds and pets. Kills only insects. Eliminates washing of fruits and vegetables before marketing.

Non-Injurious—Spray freely on the tender-plants. Won't injure the ground. est plants.

Easy to Use-Just mix with water and stir. No unpleasant odor.



Bulk prices on request, order today

Won't Gum Sprayers-No bad effect on metal or rubber.

LIME and SULPHUR (Dry)—Mixes with water—A standard lime and sulphur converted into a dry powder but having all the effectiveness of the liquid product when dissolved in water. For use in dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite. 1 lb., 30c; 5 lbs., \$1.25; 10 lbs., \$2.25. 25 lbs.....\$4.00

**NICO-FUME LIQUID—For destroying aphis, thrip and red spider, making a good insecticide for fumigating greenhouses. Contains 40 per cent nicotine. 41bs., \$5.85. 81bs.\$10.85

Control of Mexican Bean Beetle—This material is a prepared product all ready for use. Contains genuine Magnesium Arsenate properly blended with hydrated lime in accordance with official governmental recommendation. It is recommended by government and state extension authorities as best control of the Mexican Bean Beetle, may be used with equal results on cucumbers, melons and on flowers or plants of tender foliage. Will not Burn. Per lb., 35c; 4 lbs., 75c. 12 lbs... \$2.00

**NICO-FUME TOBACCO POWDER-For florists and

PARA-DICHLOROBENZENE—For killing the peach tree borers. Can be used successfully only during August and September as it is not effective if used at other seasons. Do not use on very young trees. Per 1b., 40c; 5 lbs., \$1.75.

**PARIS GREEN-A rich emerald color and of fine fluffy physical character. Containing 55 per cent arsenious oxide, it will give quickest control where extreme measures are necessary. For use on potatoes, tobacco, also to mix with arsenate of lead for fruit tree spraying where quick results are necessary. 1 lb. 50c. 5 lbs.

INSECTICIDES AND FUNGICIDES—Cont'd

FISH OIL SOAP—One of the best and safest remedies for sucking insects and plant lice on vegetables, ferns, shrubs and trees. It is also effective for preventing and destroying borers in trees when used as a wash. 1 lb., 35c. 5 lbs......\$1



CONQUERS MILDEW AND BLACK SPOT

A highly concentrated fungicide invisible on the foliage or blooms. Fungtrogen is the most effective and scientific pre-ventative and remedy for mildew, black spot and other fungoid diseases of roses and other plants.

It is equally valuable for rust on carnations grown under glass as well as snapdragons, etc., imparting a sturdy vigor hereto-fore considered impossible. Fungtrogen is a complete spray easily diluted in water, making 60 times its volume. Endorsed by leading Rosarians.

PRICES

½-pint	\$0.75	Quart	 	\$2	. 00
Pint	1.25	Gallon	 	6	.00
	Postage	Extra			



KILLS MOST LEAF-EATING INSECTS

A highly effective in-secticide for leaf-eating insects, including cater-

insects, including caterpillars, slug worms, Japanese beetle, etc., and has definite fungicidal
value for black spot on roses. An effective destroyer of leaf tier
on chrysanthemums grown under glass, etc. Use Insectrogen
alternately, as a companion spray with the famous fungicide
fungtrogen. This results in unusually fine foliage and blooms
heretofore unattainable as to color, form and general beauty.
Ready to use when mixed with water to 60 times its volume.

PRICES

4 ounces	\$0.60	Pint\$1.75
½-pint	. 1.00	Quart 2.75

KILLS APHIS (Plant Lice)



A scientific aphicide, perfected by Rose specialists, that quickly rids your plants of the destructive tiny green or pink insects, commonly called plant lice, which weaken the plant and carry disease. Aphistrogen also refreshes the foliage and is effective on all plants either outdoors or in the house. Aphistrogen will not turn the foliage yellow. It is invisible on plants and non-poisonous. Simply mix with sixty times its volume of water.

PRICES

2 ounces	\$0.50	½-pound\$1.25	
	1 pound	\$2.25	



**POMO-GREEN-Prevents and controls ""POMO-GREEN—Prevents and controls black spot, mildew and chewing insects on roses. Also a control of snapdragon rust, carnation rust, sweet pea mildew, phlox mildew and many other fungous diseases of flowering plants and shrubs without making the treatment conspicuous. Promo Dust is the celebrated Massey Dust made more toxic and colored green. 1 lb., 50c. 5 lbs........\$1 



Effective against aphids, leaf hoppers, cucumber beetles, cabbage worms, thrips, cut worms, Mexican Bean Beetle and most other plant insects.

Economical—The most Highly Concentrated Pyrethrum Spray obtainable, assuring low cost per gallon finished spray.

Non-Poisonous. Red Arrow is harmless to man, pets, live stock and birds.

Does not leave poisonous residue on fruits and vegetables and consequently eliminates expensive washing process.

Absolutely non-toxic to the soil, and may be used freely on tender foliage. Simply mix with water as directed. No unpleasant odors or dangerous fumes.

RED ARROW will not clog nozzle of sprayers.

PRICES

1-ounce\$0.35	Pint\$3.25
¼-pint1.00	Quarts 6.00
½-pint 1.75	½-gallon11.00
Callon	\$20.00



Used by leading fruit growers. aphis, red mite, leaf roller and other pests. Dilute 1 to 15. Ot., 70c; 1 gal., \$1.60; 5 gal., \$6.00; 10 gal, \$10.00; 15-gal. drums, \$13.50; 30-gal. drums, \$22.50.

NOTE—The following cash refund made when drums are returned in good condition: 15-gal. drums, \$2.00; 30-gal. drums, \$2.50; 50-gal. drums, \$3.00.



SLUG SHOT, HAM-MOND'S-One of the best insecticides for vegetables and flowers. Non-poisonous to human life. 1 lb., 25c; 5-lb. pkg., 75c. 10-lb., pkg....\$1 25



The National Pest Control

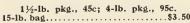
OUICKLY KILLS GARDEN PESTS

Science Provides New, Safe Method that Does the Work Without Fuss

Cutworms, Sowbugs, Grasshoppers, Slugs, Snails, Earwigs, etc., are Exterminated.

Snarol is a ready-prepared meal that you simply broadcast on the ground, under the vegetation. The pests eat the meal and are quickly destroyed.

Snarol will not deteriorate from rain or sprinkling, and also is non-injurious to vegetation when used according to simple





INSECTICIDES AND FUNGICIDES—Conc'd

DUSTING SULPHUR—Used principally to prevent and control mildew on roses and other plants. 3 lbs., 35c; 5 lbs., 10 lbs.....

TOBACCO STEMS—Used for fumigating plants to kill insects, and as a mulch for Roses, Asters, Lettuce, etc. Bale of about 100 lbs....

TREE TANGLEFOOT—For protecting trees against climbing insect pests in a simple, economical and effective way; put a band of tree tanglefoot, from 3 to 5 inches wide, completely around the tree. A perfect safeguard against Gypsy. Brown-Tail and Tussock Moth, Canker Worms and Ants, and other creeping insects. 1 lb., 60c; 5 lbs., \$2.75; 10 lbs., \$5.25. 25 lbs.....\$11.00

TREE WOUND PAINT-Prevents decay after pruning. This penetrating, antiseptic paint is not affected by heat, cold or moisture. Does not peel, crack or get brittle. Stops tree bleeding. 1-qt. cans.....\$1.00 VOLCK—Among the many pests growers have to contend with are red spiders, mites, aphis (green fly), thrips, mealy bugs, scales, white flies, caterpillars, leaf rollers. Most every grower has experienced difficulty in the control of one or more of these pests. All of control of one or more of these pests. All of them are safely and effectively controlled with Volck. Rose mildew can be prevented and stopped by Volck. ½-pt. can, 35c; 1-pt. can, 60c; 1 qt., \$1.00; 1 gal., \$3.00; 5 gal., \$12.00; 14 gal., \$25.00. 28 gal.....\$40.00





Full directions on each can.

WAX, GRAFTING—½-1b., 40c; 1 lb., 60c. (By mail add 7c per lb.)

entrated solution which dilutes one part to 49 parts of water. It kills every known variety of weed, with their roots and seeds as well. Just apply with ordinary sprinkling pot. 1 qt., 55c; 1 gal., \$1.75; 5 gal...\$6.75

Price on larger sizes on application.



DU BAY SEED DISINFECTANTS

Control Seed-Borne Diseases of Farm Crops Stimulate Germination-Improve Stands Generally Produce Increased Yields of Higher Quality

CERESAN

For Seed Treatment Of Small Grains

Ceresan has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smuts of barley and oats and covered kernel smut of sorghum. It is the only dust treatment which has successfully controlled these destructive grain diseases. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat; rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use.

1 lb.....\$.75 5 lbs.....\$ 3.00

**SEMESAN JR.

For Seed Field and Sweet Corn

Semesan Jr. is especially effective in controlling seed-borne infections of diplodia, Gibberella and Basisporium, without harming the seed embryo in the least. Its use protects the seed from rotting in the ground and makes possible earlier planting which generally results in increased yields. Improved germination, better stands, control of certain diseases, increased yields are the benefits which thousands of farmers are reaping, at a cost of less than 3c an acre. Use 2 oz. per bushel.

4 oz.....\$0.50 5 lbs.....\$ 8.00 1 lb..... 1.75 25 lbs......31.25

IMPROVED SEMESAN BEL

For Seed White and Sweet Potatoes

The Improved Semesan Bel controls Rhizoctonia and Scab. That means larger crops, better quality, more profit for the potato growers. A pound of this product treats 70 to 80 bushels of seed potatoes. The cost of treatment is now only 1½c to 3c a bushel.

4 oz\$0.5	5 lbs\$ 8.00
l lb 1.7	5 25 lbs 31.25

**SEMESAN

For Flower and Vegetable Seeds

Semesan may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to disease organisms that may be on the seed. Semesan is such a powerful and effective disinfectant that seed treatment with it is ridiculously low in cost, ranging from \(\frac{1}{2} \)c to 1c per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off and such devastating gladiolus diseases as hard rot and scab.

2 oz	.\$0.50	5 lbs	\$13.00
1 lb	. 2.75	25 lbs	56.25

"NU-GREEN OR SEMESAN

For the successful prevention and control of Brown Patch

No longer is it necessary to fear the ravages of large and small Brown Patch with the coming of hot, humid weather.

In order to prevent the appearance of these diseases which so quickly damage your expensive greens, follow a systematic plan of treating with either Nu-Green or Semesan. Both fungicides come ready for use. Neither injure the grass. They are easily and quickly applied.

Semesan is the original brown patch fungicide. It has been used successfully by many clubs and found to give excellent control under the most severe brown patch conditions. It is very effective under all conditions but is recommended especially where the turf is in a good state of fertility.

Nu-Green contains the same effective ingredient as Semesan, but has the added property of quickly restoring the diseased grass to its normal healthy condition where soil fertility is not already suited to its rapid recovery.

To prevent Brown Patch from putting in an appearance, once each ten days or two weeks, beginning prior to the Brown Patch

season, apply a solution of one pound Nu-Green or Semesan to Season, apply a solution to the point Nuclei of selectar to 50 gallons of water. Apply at the rate of 50 gallons of solution to 1,000 square feet of turf, including the approaches and borders by the sprinkling method and at the rate of 50 gallons to each 2500 to 3000 square feet with a power sprayer. NU-CREEN

3 oz	. 2.00 100	lbslbs	. 145.00									
SEMESAN												
2 oz		1bs										
1 lb		1bs	. 220.00									
5 lbs	.13.00											

Du Bay Seed Disinfectants, like many agricultural chemicals, are poisonous in nature and owing to present Postal Regulations cannot be sent through the mails, but must be sent by express or freight.

Treat all seeds before planting with Du Bay Disinfectants

SPRAY CALENDAR

•	Spray No. 1	Spray No. 2	Spray No. 3	Spray No. 4	Spray No. 5
PEACH	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime-Sulphur or Scalecide. Controls leaf curl and San Jose scale and some aphis. For peach tree borers, use Para-Dichlorobenzene.		Two or three weeks later than No. 2. Use same materials as No. 2. Controls curculio, pustular spot, scab and rot.	-	
CHERRY	(Dormant Spray). With Lime-Sulphur on sweet cherries only. Controls San Jose scale.	(Preblossom Spray). Apply Lime-Sulphur, 2 tablespoonfuls to 1 gal. water. Controls rot and curculio.	Just after blossoms fall. Apply Lime-Sulphur as in No. 2 and Arsenate of Lead. Controls leaf spot, rot and curculio.	Two weeks after No. 3. Use Lime-Sulphur 1-40 plus Arsenate of Lead. Controls rot, curculio, leaf spot and mildew.	After the fruit is picked. Apply Lime Sulphur along with Arsenate if slugs are present.
QUINCE	Same as apple.	Same as apple.			
APPLE	(Dormant Spray). Use Lime-Sulphur or Scalecide in fall or spring to control scale. Add Black Leaf 40 to Lime-Sulphur for the delayed dormant spray to control aphis. (Do not use Scalecide in the delayed dormant). Scalecide kills the eggs of leaf roller and red mite.	(Preblossom Spray). When pink shows in cluster buds before blossoms separate. Apply Lime-Sulphur Bordeaux with Arsenate of Lead (add Black Leaf Forty if aphis are present). Controls apple scab, curculio, canker worm and aphis.	(Calyx Cup Spray). Just after petals fall, before calyx closes. Apply Lime-Sulphur with Arsenate of Lead (add Black Leaf 40 if aphis are present). Controls apple scale, sooty fungous, curculio, codling moth and canker worm.	Fourteen days after petals fall. Apply Lime-Sulphur or Bordeaux and Arsenate of Lead. Controls scab, apple blotch, codling moth and canker worm. (Bordeaux may cause burning.)	About July 15th apply Lime-Sulphur or Bordeaux and Area-ate of Lead. Control rot, apple blotch and codling moth.
PEAR	Same as apple. Scalecide applied in the fall or early spring controls pear psylla.	Same as apple.	Same as apple.		
PLUM	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime-Sulphur or Scalecide. Controls San Jose soale and some aphis eggs.	When buds are swelling. Apply Lime-Sulphur as in Cherry. Controls rot.	(European varieties). After caly x drops. Apply Arsenate of Lead.	(European varieties). Repeat No. 3 two weeks later.	
GRAPE	Just before the blossoms open. Ap- ply Bordeaux. Con- trols mildew and black rot.	Just after fruit sets Repeat No. 1. Con- trols black rot and mil- dew.	Two weeks later. Apply Bordeaux and Arsenate of Lead.	July 15 to 30. Use Bordeaux and Arsenate with soap as spreader. Add Black Leaf 40. Apply with plenty of pressure and to under sides of the leaves. Controls berry worm and fungous diseases.	
CURRANT AND GOOSEBERRY	Apply Lime-Sulphur		ply Bordeaux and Ar-	Whenever ourrant worms appear. Dust with Arsenate of Lead and Hydrated Lime. Controls mildew and	
RASPBERRY AND BLACKBERRY	(Dormant Spray). If bushes are infested with scale. A pply Lime-Sulphur or Scalecide. Controls Rose scale and San Jose scale.	When buds are swelling. Apply Ar- senate of Lead. Con- trols Beetle.		When young canes are 6 inches high. Spray with Bordeau. Controls anthracnose on young cane.	
STRAWBERRY	half grown, before blooming. Apply	One week later. Apply Spray No. 1 on young plants. Omit thespray on old plants. Controls leaf spot.	June. Apply Hellebore for leaf rollers and	After fruit is picked. Mow the vines close to the ground, rake off tops and burn. Spray new tops with Bor- deaux. Controls mildew and fungous diseases.	

FERTILIZERS





SACCO is a COMPLETE BALANCED PLANT FOOD made specially for the development and care of

BEAUTIFUL LAWNS, GARDENS, SHRUBS, FLOWERS AND TREES

PRODUCES EXCEPTIONAL RESULTS

A single SACCO application can be depended A single SACCO application can be depended upon to make grass and vegetables grow vigorously and to make flowers and shrubbery beautiful with bloom and foliage. This plant food gives quick results, is easy to apply and, because only a small quantity is required, it is very economical. The 85-cent size—10 bs.—is sufficient to fertilize plot of lawn 20 x 25 feet. The \$1.75 size—25 lbs.—will cover plot 40 x 30 feet. See "Amount to apply" below.

RECOMMENDED BY BEST **AUTHORITIES**

SACCO has the approval of horticulturists and soil authorities everywhere. On the lawns and in the gardens of the finest private estates-in the nurseries of progressive florists and growers-SACCO has proved its unquestionable superiority.

SACCO is less expensive to use than ordinary manure or fertilizers. SACCO IS CLEAN, ODORLESS AND VERY EFFECTIVE.

For every one hundred square feet (10 x 10' area) use two to four pounds of SACCO for best results. Simple instructions for applying SACCO come in each package. PRICES—1-1b. can, 15c; 5-lb. bag., 50c; 10-lb. bag, 85c; 25-lb. bag, \$1.75; 50-lb. bag, \$3.00; 100-lb. bag, \$5.00.

A handy sifter cap in each package, affords an easy means of applying SACCO quickly and evenly.







FEEDS GRASS-FIGHTS WEEDS

Here is a dual purpose fertilizer—made as a special feeding ration for lawns only, and to control weeds.

ENDORSED BY EXPERTS

Wedo contains the recommended amounts of Nitrogen (Ammonia), Phosphates and Potash as proven by soil authorities to be best adapted to lawn grasses. Greenskeepers and soil experts are using Wedo in

Special Fertilizer

for LAWNS

their most difficult lawn work, because they have found Wedo to be their very best turf builder. Wedo is an ideal fertilizer for Creeping Bent lawns and putting greens.

VERY ECONOMICAL

Only 11/2 pounds are required for 100 square feetabout one half the amount required when ordinary plant foods are used.

10	lbs.	 	 				 	 									\$0.9	5
25	lbs																\$2.0	0
50	lbs					•								•			\$3.7	5
100	1bs																\$6.5	0

PULVERIZED SHEEP MANURE

TOLVERIZED SHEEF MANORE

This is a pure natural manure and one of the most nutritious foods for plants. Its effect is immediate. It is very rich, safe and gives quick results. It will give excellent results on flower beds, lawns or in vegetable gardens, as it contains all the elements for promoting a quick, luxuriant growth, as well as adding body to the plant. Can be used either in dry form or dissolved to make a liquid manure. If applied dry, no raking off is required as it does not disfigure the grounds, nor does it contain seeds of foul weeds, nor offensive odor.

offensive odor.

Directions—For lawns, apply broadcast at the rate of five to six hundred lbs. per acre in February, March or April in spring, or in September or October in the fall. For pot plants mix one quart of sheep manure to six parts of soil. For use in the regardle agarden apply either broadcast and rake in or in drills at the rate of fifteen hundred to two thousand pounds per acre and mix slightly with the soil. For liquid application use 1 lb. to 5 gallons of water.

gallons of water.

Prices, 5 lbs., 30c; 10 lbs., 50c; 25 lbs., 90c; 50 lbs.

\$1.60; 100 lbs....\$

PURE BONE MEAL

This pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 10 lbs. per thousand square feet or 400 to 500 lbs. per acre. Analysis, ammonia, 2%; total phosphoric acid, 27%. Prices, 1 lb., 10c; 5 lbs., 30c; 10 lbs., 50c; 25 lbs., 90c; 50 lbs., \$1.60; bag of 125 lbs... \$3.25

CATTLE MANURE (Shredded)

A substitute for stable manure in gardens and greenhouses, as it supplies plant food, humus and organic matter; largely used for rose culture and for mulching. The quality we offer is selected manure taken from paved Stock Yards cattle pens dried and sterilized by a high temperature direct heat process which kills weed seeds, fungous and disease germs. 100-lb. bags only.

Per bag of 100 lbs.....\$2.25

DRICONURE

This product is an ideal plant food and soil conditionermerely a stimulant. It corrects over-fed, under-nourished, or worn out soil troubles. The ingredients consist of high-grade, sterile, odorless, dehydrated cow manure, combined with quality peat moss. A ready-to-use turf and garden dressing, which is made of the best materials. For new seeding, work in about one-third of a bag (20 lbs.) which is a light application for rich soils and double this quantity as a heavy application for poor soils, to each 150 sq. ft. As a top dressing on gardens and lawns, one bag to about 400 sq. ft. Spade in a trowelfull around perennials, roses and shrubs. Easy to handle and easy to apply. Packed in bags weighing about 50 lbs.—3 to 31/2 bushels in bulk. Per bag.....

FERTILIZERS—Cont'd

Beautifies Lawns, Vegetable Gardens, Flowers, Potted Plants. Fruit and Shade Trees

Here is a concentrated, high quality plant food, rich in the elements vital to plant life—nitrates, phosphates and potash, as well as other plant nourishment. All the food elements that lawns and gardens need, combined and processed to make them quickly and fully available.

LAWNS FLOWER GARDENS VEGETABLE GARDENS SHRUBBERY POTTED PLANTS KKY WEIGHT OF LAN

Demonstrations gardening enthusiasts and leading growers of the country have led thousands of home-owners throughout the country to prove for themselves the power of Loma.

Everywhere the results are the same. In less than two weeks' time, grass treated with Loma is noticeably taller, thicker, greener. Loma produces bigger and juicier vegetables, larger and brighter blooming flowers.

Lōma is odorless, clean, many times more powerful than barnyard manures, and entirely free from weed seeds. So easy to apply, too. It is sown like grass seed—then wet down. That's all there is to it.

1-pound can.....\$0.25 10-pound bag.....

25-pound bag..... 1.75 50-pound bag..... 3.00 100-pound bag..... 5.00 prepared plant food for
LAWNS
SHRUBBERY
POTTED PLANTS
TLOWER GARDENS
EGETABLE GARDENS
TREES

SULPHATE OF AMMONIA

Contains approximately 25 per cent of ammonia and comes in fine crystals which are very nice to apply broadcast. Owing to its firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries 5 per cent more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses five pounds of Nitrate of Soda.

1 b., 10c; 5 lbs., 35c; 10 lbs., 60c; 50 lbs., \$2.00; 100 lbs.......................\$3.50

NITRATE OF SODA

As a top dressing use at the rate of 100 lbs. per acre between the rows when the plants are well established, on the following vegetables: Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery and Onions. For Asparagus, a top dressing of 250 lbs. per acre when the young shoots are starting in the spring. For Strawberries, apply between the rows at the rate of 100 lbs. per acre at the time of blossoming. For the home garden, apply a solution of one ounce to two gallons of water.

1 lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 50 lbs., \$2.00; 100

16% ACID PHOSPHATE

Some soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid. This must be supplied for the purpose of producing a balanced combination of tertilizer elements, by the application of 16% Acid Phosphate which produces a beneficial effect by supplying the proper proportion of Phosphoric Acid. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%.

5 lbs., 30; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; per bag of 125 lbs. \$2.75

MURIATE OF POTASH Apply 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful.

1 lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 50 lbs., \$2.00; 100

PULVERIZED LIMESTONE

A Lawn and Garden Conditioner

The agricultural value of lime is well known and it is an
economic neutralizer for soil acidity, also for binding sandy soils

economic neutralizer for soil acidity, also for binding sandy soils and loosening clay soils.

For renewing old lawns use at the rate of 100 pounds for each four hundred square feet.

For new lawns give a generous coating at the rate of 1,000 to 2,000 pounds per acre for sandy soils and 2,000 to 3,000 pounds per acre for clay soils.

Lime will be found very beneficial in the growing of all garden crops, fruit trees and flowers. also for leguminous crops, such as Alfalia, Sweet Clover, Red Clover, Soy Beans, Cow Peas, Vetches, etc.

Per bag of 80 lbs., \$1.00; 5 bags, \$4.00; 10 bags.....\$7.00

AMERICAN PEAT SOIL SPONGE

(The Water Reservoir)

(The Water Reservoir)

Very often too much emphasis has been placed on the analysis of the soil and too little on its moisture retaining qualities. This is a mistake, as moisture is 95% of plant growth and absorbent peat is the medium to supply this want.

Peat Moss is usually used straight. Soil Sponge should never be used straight, but always mixed with other soils. Soil Sponge is not a fertilizer, has a low analysis, but when mixed with soil, remarkable and lasting results are obtained, because Soil Sponge will absorb and retain large amounts of moisture, which is so essential to plant growth, because these purely organic fibers act as a breeding ground for the nitrogen fixing bacteria, and because Soil Sponge does not decompose for years. Soil Sponge will develop beautiful lawns, gardens, shrubs, flowers and trees.

51bs., 25c; 101bs., 40c; 25 lbs., 75c; 501bs., \$1.25; 1001bs., \$1.75; 500 lbs., \$8.00; 1000 lbs., \$14.00; 2000 lbs....\$26.00

IMPORTED GRANULATED PEAT MOSS or BULB FIBRE

Fenn, palms and other potted foliage plants that are placed in jardiniers or window boxes, will keep wonderfully well, if the space between the pots is filled in with moistened Granulated Peat Moss to the height of the shoulder of the plant pots. Flower pots are porous, and the capillary attraction of the roots draw the moisture from the moss through the pots; furthermore the air is allowed free access and is always somewhat damp—a natural condition for most pot plants.

This Granulated Peat Moss or Mull is especially selected for horticultural purposes. It is finely granulated, of little weight, and is entirely free from foreign matter. It is packed in compressed bales, burlaped on all sides, sticked and wire strapped. When loosened the contents will cover 240 sq. ft., I inch deep. It is not sold by weight, because the weight of the bale is dependent on its moisture content, which varies according to atmospheric conditions.

ditions

A few of the many purposes for which it is used: Fertilizer Carrier, Mulching, Cold Frames, Lawns, Improving Soils, Propagating, Cuttings, Landscape Work, Benches (Greenhouse), Golf Courses, Packing, Storing Bulbs, Potting, Layering, Seed Beds, etc. Send for booklet giving detailed information.

Two-bushel garden package, \$1.50; large bale, about 20 bushels, \$3.50. Bale, about 15 bushels.

DRIED BLOOD MEAL

A splendid fertilizer for Roses, Carnations, Chrysanthemums, etc., as well as for pot plants. Can be mixed with the soil or applied in liquid form.

1 lb., 10c; 25 lbs., \$1.50; 50 lbs., \$2.50; 100 lbs......\$4.50

FERTILIZERS—Cont'd

HUMUS

Exhaustive tests have proven that Humus makes a balanced feeding for plant life, a food that can not be supplied otherwise. Humus is not sold to eliminate the use of fertilizers but to release the natural fertilizers from the soil and make them available. The average soil contains enough potash, but due to improper cultivation or acidity only a small portion has ever become available. The Humus we offer is taken from a bog seventy-five feet in depth and has undoubtedly been in process of formation since the end of the glacial period. This Humus is then passed through processes which more thoroughly break up the fibres and destroy harmful bacteria and weed seeds.

Our Humus is odorless and contains no insects harmful to plant life. For pot plants, the garden or greenhouse it is advisable to use at the time of planting, application being made to the seed row or to roots of the plant.

Facts—Food put into the human body will not sustain life unless properly digested. Plant food (fertilizer) put into the soil will not benefit plant life until it is digested. Our Humus digests the fertilizers.

For making Artificial Manure—Dry leaves, mixed with Adco and kept moist, turn into excellent manure. So do flower stalks, cuttings, pea vines, and almost any other kind of non-woody

stakes, cuttings, pea vines, and almost any other kind of hon-woody vegetable waste.

Adoc is a powder which, mixed with vegetable matter and kept moist, turns the latter into Real Manure, but without the odor, flies, etc. The process is perfectly simple and not at all laborious. The method is being generally adopted by gardeners, who know that manure is a necessity to the soil and can no longer be obtained from stables. Farmers can use straw, corn stalks, etc., and need

from stables. Farmers can use straw, corn stalks, etc., and need no longer maintain live stock.

Price, Adco. in 25-1b. bags, each \$2.00. (Enough for about 12 wheelbarrow loads of garden waste, making one-half ton of manure.)

Adco, in 100-1b. bags (4-25's), each \$7.75. (Enough for a heap 8 ft. x 8 ft. x 6 ft., making about two tons of manure.)

Adco, in special 150-1b. bags, each \$10.50. (Enough for a heap 10 ft. x 10 ft. x 6 ft., making about three tons of manure.)

Each shipment is accompanied by simple directions, which makes any mistake impossible.

PLANT MARVEL

Ensures bushy ferns and healthy flowers and plants. It is a pure, rich, quick-acting plant tonic and contains 61.30 per cent of plant food. Begins to feed instantly. Nourishes continuously and plentifully. Package, 25c; ½-1b. container. 60c; 1-lb. container, \$1.00 The \$1.00 size is the most economical.

SPRAYIT PLANTILIZER



Sprayit Plantilizer nozzle, complete with set of cartridges.\$1.00 Refill cartridges as needed, set of five......25c

STIM-U-PLANT

Growers of fine flowers, shrubs and vegetables for the best markets and for exhibition, fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-UplanT, an odorless, highly concentrated plant food, in tablet form, with guaranteed chemical analysis of 11 per cent nitrogen, 12 per cent phosphoric acid, 15 per cent potash. The proportions are accurate, there is no wasted filler, and in this form you apply plant food exactly when and where and as needed.

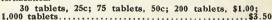
Easy to Use—Simply insert tablets in soil near plants or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package. Order Stim-U-planT tablets with your seed and plant order.

Price, 30 for 25c.

PLANTABBS

Plantabbs are small, white, odorless, highly concentrated plant food, ideal for house plants where smelly fertilizer cannot be used but equally good for all garden planting.

Plantabbs are economical, there is no waste; they are clean, odorless, easy to apply, give uniform feeding and by dissolving quickly produce immediate fertilization.





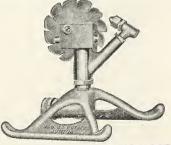
3-Way Dayton Sprinkler—Entirely new. Three different sprinkling heads combined in one unit—

LAWN SPRINKLERS



Double Rotary
Sprinkler—Next best
to rain. Operates on
the rotating principle,
resulting in a sprinkle
like a gentle shower.
Will sprinkle a circular
area up to 80 feet in
diameter — more than
5,000 square feet. A
sturdy, durable machine
—well built of best
materials and entirely
self-operating. For golf
clubs, parks, cemeteries
and private estates. and private estates. Each.....\$12.50

Double Rotary Junior Sprinkler -Possesses all the features home owners want in a sprink-ler. Can be used as a rotating sprinklera stationary sprinkler or by adjusting the nozzle, a stationary spray. Adapted to lawns and gar-dens of any size. Each.....\$7.50



Rain King—A real innovation in the sprinkler line, and radically different from any other sprinkler made.

Circular or stationary spray—fine or coarse—fast or slow—large lawn, small lawn—trees, shrubs, flower beds—takes care of them all.

Small, compact, easily handled. No cumbersome contrivance always in the way. Simple adjustments—made easily. Set instantly as a revolving or stationary sprinkler.

Superior Rubber Hose—An extra high-grade, long wearing rubber hose. We can supply in any length. Prices include couplings. 1/2-inch, per ft., 9c; 1/2-inch, per ft., 10c; 1/2-inch, per ft., 11c.

Stamped Clinching Hose Coupling—Does not require extra bands, bolts or wires. Slip in the hose and hammer

GARDEN HOSE and APPLIANCES

Hose Washers-Rubber. Per doz......10c

SPRAYERS AND DUSTERS

Compressed Air and Knapsack



HUDSON PERFECTION SPRAYER

For general high pressure purposes, the Perfection is the very best. Easily operated and economical to use for whitewashing, disinfecting, deodorizing, cold water painting, etc. Best materials, best construction and best quality throughout.

Capacity, 4 gallons. Pump is seamless brass tubing. Fastens to tank by heavy threaded malleable cap which screws onto brass tank collar.

Nozzle is designed for high pressure work. Handles any solution and works perfectly under all pressures.

Regularly equipped with 2-foot brass extension rod as shown. Permits the operator to quickly and easily reach low-lying plants, under surfaces of leaves, all parts of trees, shrubs or vines, or the nooks and corners of the poultry house, dairy barn or hog pen, without tiresome bending or climbing. Fitted with standard 14-inch iron pipe threads so that a longer rod can be used if desired.

No.	110-B-	-Brass	tank.	Each		 	 	 \$8.75
No.	110-G-	-Galva	nized	tank.	Each	 	 	 6.00

HUDSON JUNIOR SPRAYER

The Junior Sprayer is made for the man who needs a medium size high pressure Compressed Air Sprayer. It is particularly adapted for the backyard garden, small truck farm or for disinfecting. It will do any work the larger models can, for it differs from them only in capacity. It is substantially made and will give entire satisfaction. Capacity, approximately 2½ gal.

No.	140-B-Junior, brass	
tank.	Each\$6.2	5
No	140-G-Junior, gal-	

No. 140-G—Junior, galvanized tank. Each...\$4.25



EXTENSION PIPE



COMET CONTINUOUS SPRAYER

The Comet Continuous Sprayer handles fly oil, insecticides, disinfectants and all other solutions very efficiently. The variable nozzle is instantly adjustable for any solution or for any type of spray from fog to solid stream. Pump is recessed into top of tank and securely soldered, a very rigid construction. All working parts are brass with siphon tube and check valve easily accessible. Pump and tank are made of heavy tin. Capacity, 1 quart.



HUDSON CLIMAX SPRAYER

The Climax offers all the essentials of a high pressure compressed air sprayer at a minimum cost. Made of high quality material throughout. Adapted for all classes of work. Handles whitewash, cold water paints, insecticides and fungicides very efficiently.

Capacity approximately 4 gallons. Tank made of prime galvanized sheet. Pump, seamless brass tubing. Clamp top permits instant locking or releasing by half turn of the comfortable "T" handle. Nozzle all brass with curved brass extension.

No. 135-G—Galvanized tank. Each......\$3.75





HUDSON THRIFTY SPRAYER

The Thrifty Sprayer is a small capacity, high pressure compressed air sprayer for the home-owner, suburbanite, backyard gardener, or poultry fancier, at a moderate cost. Sturdily built, of first quality material throughout.

Tank is made of first quality galvanized sheet tested under actual working conditions at the factory. Capacity approximately 2 gallons.



MASTER FOG SPRAYER

Produces extraordinarily fine mist-like spray. Well constructed, tested and inspected. Capacity, 1 quart. Each....50c



HANDY SPRAYER

Carefully made of good material. Tank lockseamed and thoroughly soldered. Capacity, 1 quart. Each......35c

SPRAYERS AND DUSTERS-Cont'd



VAPOR SPRAYER

An excellent small sprayer for use in the garden or for household use. Capacity, about ¾ pint. Each......25c

PERFECTION NOZZLE

The Perfection Nozzle is constructed entirely of brass, with all parts carefully machined. Liquid channels are large and non-clogging. Large packing nut gives ample packing space and holds the shut-off pin in perfect alignment. The pin is leather tipped, shuts off instantly, and without leakage. Operates with a slight pressure of the fingers.

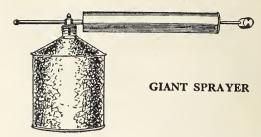
ANGLE FOG NOZZLE





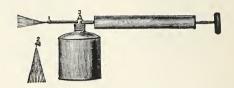
JIM DANDY SPRAYER

Adapted for spraying garden and farm vegetables of every description; shrubbery, grape vines, currant bushes, fruit trees, etc. Will spray rapidly disinfectants in schools, public buildings, poultry houses and stables; fly spray on cattle; whitewash, carbola, cold water paints, etc.



Gives a powerful spray. Easy to operate. Has galvanized container. Capacity, ½-gal.

Each \$1.50



"JAKE" COMPRESSED AIR SPRAYER

These sprayers have stood the test for years. Equipped with Universal Nozzle that sprays up and down and to either side, in addition to the direct spray nozzle.

MODOC SPRAY PUMP

The Modoc is used in spraying fruit trees and vines, garden truck, ornamental shrubs and hedges; for whitewash, disinfectant, insecticides; for washing automobiles, wagons, windows, or in an emergency as a fire pump.

It is double acting and continuous, developing 150 pounds nozzle pressure.

Makes a very convenient portable outfit because it can be used with a bucket or small tank. Valves and plunger are accessible for cleaning, etc. Nozzle discs are reversible or removable, producing any desired spray from the very finest to a solid stream. All parts except the handle and foot rest are brass.

Discharge Equipment—3 feet of finch spray hose, a 12-inch extension and fog nozzle fitted with discs for spray or solid stream. Can be used with a longer extension rod if desired. Each. \$3.60



DUSTERS



ROBERTSON SPRAYER



MODEL BX—FEENY DUST GUN

The Feeny Dust Gun is a mechanically perfect apparatus which emits powder in clouds of right consistency from any position and in any direction, downward, upward or horizontal. Entirely different principles of mechanism have been brought into play than have been used heretofore on such outfits.

MODEL BX—Like cut.	28 inches long.	Each90c
MODEL D-Two-quart	capacity. Each.	\$2.75

SPRAYERS AND DUSTERS-Cont'd

DUSTERS-Cont'd



MAJOR DUSTER

of discharge.



CADET DUSTER

Adapted for use with all insect powders. A favorite with the housewife in applying roach, ant and various bug powder.

PARAGON SPRAYERS

Paragon Sprayers are of superior quality in material and workmanship; they have the following exclusive features:

Large reserve brass air chamber which makes it twice as easy to operate and maintain a high working pressure, insuring a uniform fine mist spray.

The pump is not submerged in the liquid. Have a large circular strainer containing 16 square inches of straining surface automatically cleaned.

Ample equipment, much more than sent out with the ordinary sprayer.

When all these features are considered it is cheaper in price, will give better satisfaction and last a lifetime.



No. 1. Paragon Sprayer

No. "O"—Capacity, 3½ gallons.—Equipment, 4 ft. of special spray hose, 3 ft. spray pipe, 3 spray nozzles.......\$12.50

No. "1"—Capacity, 6 gallons.—Equipment, 5 ft. special spray hose, 5 ft. spray pipe, 3 nozzles. Net price......\$17.50



No. 3. Paragon Sprayer

No. "3"—Capacity, 12 gallons.—Equipment, 10 ft. special spray hose, 7½ ft. spray pipe, 3 spray nozzles. Net price, complete, \$22.50. Without truck......\$19.00



No. 4. Paragon Sprayer-Mounted

Bamboo Brass Line Spray Poles-10 ft. lengths. Each....



PARAGON SPRINKLING CART

For private estates and golf clubs

Excellent for applying any liquid insecticide, disinfectant or weed killer. Capacity, 50 gallons. Sprinkling arm 72 inches. Barrel can be removed from truck as the axles are fastened to steel bands 6 inches wide, not on barrel. Wheels, 30 inches in diameter with 4-inch tread. Has agitator to mix solution in barrel. Stop cock with lever to operate from push handles. Covers 1,000 square feet with 50 gallons of solution. Price.\$42.50

RECLEANED BIRD SEEDS, PET SUPPLIES, BIRD HOUSES, ETC.



It is very important that you make the proper selection of foods for your birds; pure, fresh, clean food is necessary at all times. Our bird seeds are of the highest quality, fresh and recleaned. Your pets will thrive if you get your supplies in this

Bird Pep—Keeps canary birds in prime condition and revents loss of song. Easily attached to cage. Pkg., 15c. 2 for

Canary Seed—Recleaned and of splendid quality. Per lb., 15c; 2 lbs., 25c. Postage extra.

Canary Seed, Mixed—A mixture of the finest quality and in proper proportions. Per lb., 15c; 2 lbs., 25c. Postage extra.

Cuttle Fish Bone—Good for digestion and general health. Each, 5c; per ½-1b., 20c; per 1b., 50c. Postage extra.

Hemp Seed—Birds are very fond of this seed; it is rich and should be fed with discretion. Per 1b., 15c; 2 lbs., 25c. Postage

Lettuce Seed—A slight sprinkle of this is much relished by canaries. Per lb., 35c. Postage extra.

Maw Seed-Calculated to improve the song of canaries, etc. 1/4-1b., 10c; 1b., 25c. Postage extra.

Millet Seed-Nutritious and appetizing. Lb., 15c; 2 lbs., Postage extra.

Rape Seed—Will keep birds in excellent condition; feed with canary seed. Lb., 15c; 2 lbs., 25c. Postage extra.

Sunflower Seed—We are large handlers of this important food for parrots. We turn out only a very choice article.

15c; 2 lbs., 25c. Postage extra.

PRICES ON BIRD SEED IN LARGER QUANTITIES, QUOTED ON APPLICATION

BIRD SUNDRIES

Canary Bird Nests—A wire basket well made. Each1	·uc
Bird Nesting—Per pkg	0c
Bird Baths-Made of opal glass. Each	
Seed Cups—Made of opal glass. Each	0c
Drinking Cups—Made of opal glass. Each	0c
Egg Food and Tonic Cups—Each	5c

FISH FOOD AND SUPPLIES

Fish Food—Especially put up for fish in aquariums and globes, and should be fed regularly. We can supply it in water or in natural form. Per box, 10c. (By mail, 15c.)

Natural Fish Food-In bulk. 1/4-lb., 20c; 1 lb......60c

Goldfish Bowl and Aquarium Ornaments—Attractive designs. Each, 15c to \$1.25. Postage extra.

Sea Shells—Per lb., 15c. Postage extra.

Pearl Chips-Per 1b., 10c; 3 lbs., 25c. Postage extra.

Colored Chips—Beautifully colored, many shades. Per lb., 15c; 2 lbs., 25c. Postage extra.

Dip Nets—For handling gold fish when changing water in globes or aquariums. Each, 15c. Postage extra.

Bird Sand—Silver, fine. Pkg., 15c; 2 for 25c. (By mail add 7c per pkg.)

Chenoweth's Canary Food—Revives the desire to be lively and sing more lustily. Should be fed two or three times a week to keep birds in good health, song and plumage. Per pkg., 25c. (By mail, 30c.)

Burnett's Food—Will give immediate relief from the effects of moulting, eradicates all impurities from the blood, and restores to the songster, a strong and clear voice. Per bottle, 20c. (By mail, 25c.)

Burnett's Louse Powder—An effective remedy to be dusted on all kinds of birds. Per can, 25c. (By mail, 30c.)

Burnett's Liquid Tonic—For birds. Per bottle......30c

Burnett's Bird Wash—Per bottle......25c

Health Bells—A conditioner and tonic consisting of the best ingredients. A small bell attached to bottom rings when bird eats. Each, 15c. 2 for 25c



BIRD HOUSES



Wren Hutlet

These Wood Craft Houses are well constructed of first-class seasoned wood, covered with a tinted stucco which will last a lifetime. They are built for the true purpose of attracting the birds and will resist weather conditions.

Help protect and multiply our native birds. They will repay in song and chirp, add attractiveness and enliven grounds, besides destroying countless worms, bugs, beetles and grasshoppers which

devour vegetation.
Wren Hutlet. Each\$ 2.25
Bluebird Hut. Each
Robin Home, small, open on three sides. Each 3.00
Robin Home, medium, open on four sides 3.75
Robin Home, large, open on four sides. Each 5.25
English Sparrow Traps 9.00
Winter Feederies, three sizes\$3.00; \$3.75 and \$5.25 each
Martin Houses, 3 rooms. Each
Martin Houses, 7 rooms. Each
Wild Bird Feed—A mixture of grain and seed for wild birds. 5 lbs., 35c; 10 lbs., 60c. 25 lbs

RECLEANED BIRD SEEDS, PET SUPPLIES, BIRD HOUSES, ETC.—Cont'd



OUR GUARANTEE

We guarantee that your dog will eat Miller's A-1 Dog Foods. Use twenty-five per cent of the food purchased and if you are not entirely satisfied, return the unused portion and you will be refunded your full purchase price.

MILLER'S A-1 BISCUIT

MILLER'S A-1 KIBBLED BISCUITS AND PUPPY MEAL

The healthful food elements in Kibbled biscuit are very desirable. Kibbled biscuit has been prepared for mixing with gravies, broths and warm milk. 2 lbs., 25c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.75; 50 lbs., \$5.00; 100 lbs....\$9.50

MILLER'S A-1 RATION

This is a granular cereal meat food that can be fed to dogs of all ages and all breeds—for varying the diet and is a wonderful coat conditioner for show dogs. 2 lbs., 25c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs....\$6.50

MILLER'S A-1 VITAMIL

A vitalized food. Developed to supplement the regular distance of the necessary vitamins and minerals. A combination of yeast, cod liver oil, calcium phosphate, linseed, charcoal and other healthful ingredients necessary to growth and good health. 4-oz. can, 50c; 8-oz. can, 75c; 16-oz. can.

MILLER'S A-1 DOG SOAP

VITAMONT

SPRATT'S DOG FOODS

Spratt's Dog Cakes—In large cake form for older dogs. 1 lb., 15c; 10 lbs., \$1.20; 25 lbs., \$2.90; 100 lbs...........\$11.00

Spratt's Ovals—The pocket dog biscuit; for all breeds. 1 lb., 15c; 10 lbs., \$1.20; 25 lbs., \$2.90; 100 lbs.......\$11.00

Spratt's Weetmeet—A granulated food for puppies from weening and for brood bitches, bulldogs and dainty feeders. 1 lb., 15c; 10 lbs., \$1.25; 25 lbs., \$3.00; 100 lbs...........\$11.50

Spratt's Fibo—A granulated food with volk of egg for shy feeders. 1 lb., 15c; 10 lbs., \$1.35; 25 lbs., \$3.25; 100 lbs., \$12.50

Spratt's Rodnim—The "twice-a-week change" of diet.
1 lb., 15c; 10 lbs., \$1.20; 25 lbs., \$2.90; 100 lbs.......\$11.00
Spratt's Flea Powder—Per can, 25c. (By mail, 30c.)

THOROBREAD DOG FOODS

Thorobread Dog Cakes—A balanced food for all dogs—high in protein—economical. Per lb., 15c; 2 lbs., 25c; 10 lbs., \$1.20; 25 lbs., \$2.75; 100 lbs., \$9.00. Postage extra.

Thorobread Kibbled—A granulated balanced food which can be mixed with table scraps. Per lb., 15c; 2 lbs., 25c; 10 lbs., \$1.29; 25 lbs., \$2.75; 100 lbs., \$9.50. Postage extra.

Zurruz Liquid Flea Soap—Absolutely pure. Per 10-oz. can, 35c. (By mail, 45c.)

LAWN MOWERS

GENUINE PHILADELPHIA LAWN MOWERS

The Philadelphia Lawn Mower has stood the test for years and is acknowledged to be one of the best and a strictly HIGH-GRADE MOWER.

Style A—5 blades, 10-in. wheel, 6½-in. revolving cutter. It has triple-pawl ratchets in both wheels, but the revolving cutter is driven by a single train of gears to insure lightness. The Style "A" is built with adjustable bearings in the revolving cutter journals and all oil holes are protected with oil-cups to insure proper lubrication. Blades of crucible steel. Stationary knife of special chrome steel. Adjustable bushing bearings. 17-in. \$21.6

Style K—5 blades, 10-in. wheel, 6½-in. revolving cutter. An internal-gear driven machine with flat sliding-pawl ratchets at each end of revolving cutter. Blades of crucible steel. Stationary knife is the "lip" style. It is of extreme hardness and will hold its edge for a long time. Equipped with Arguto oilless bearings. 16-in., \$18.50; 18-in...............\$20.50

Style SC—4 blades, 9-in. wheel, 5½-in. revolving cutter. A new pressed steel mower. Light and easy running. Built on the internal-gear principle making it a very serviceable lawn mower. Triple roller clutches are installed in the revolving cutter gears. These make absolutely no noise. Blades of crucible steel. Equipped with radial ball bearings. 15-in.......\$17.00

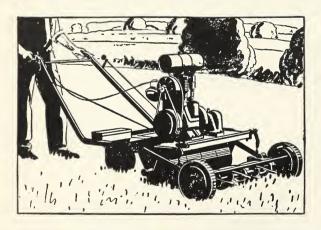
Style BB, High-Wheel Type—4 blades, 10-in. wheel, 5½-in. revolving cutter. Pressed steel wheels and side frames. Internal gear drive. Radial ball bearings. Sliding pawl ratchets. Distinctly superior in strength, ease of operation and mowing performance. 16-in. \$11.0

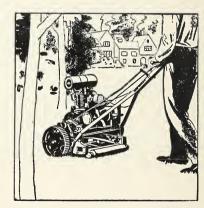
Style BB, Low-Wheel Type—4 blades, 9-in wheel, 5½-in. revolving cutter. Pressed steel wheels and side plates. Internal gear drive. Radial ball bearings. Sliding pawl ratchets. A well-made mower for use on small lawns. 16-in.......\$9.00

KEEP YOUR LAWN MOWER SHARP



IDEAL POWER LAWN MOWERS





Ideal Power Lawn Mowers are real labor savers and lawn builders.

The 22 and 30-inch width of cut, Roller Type Mowers, roll and mow in one operation, and are particularly well adapted for use on lawns that are fairly level and open.

The 20 and 25-inch width of cut, Wheel Type Mowers, are easy handling and especially well suited for use where there is a lot of trimming work to be done around trees, shrubbery, etc., or steep hillsides to mow.

Engines on Ideal Mowers are more powerful than used on any other mowers of similar capacity, thus insuring longer life, economical upkeep and greater dependability.

Special literature upon request.

PLANET JR. GARDEN TOOLS

Complete Illustrated Catalogue on Request.



PLANET JR. No. 4

Combined Hill and Drill Seeder, \$18.00. As Drill Only, \$14.25.

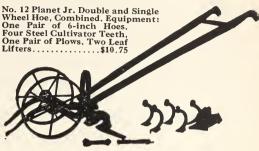
PLANET JR. WHEEL HOES

No. 12. Double Wheel Hoe—Has 8 cultivating teeth and weeding tools. Our net price complete..... ..\$10.75 No. 13. Double Wheel Hoe-2 weedin only. Our net price..... Double Wheel Hoe-2 weeding hoes, No. 16. Single Wheel Hoe-Has 7 cultivating teeth, a garden plow. Our net price 9 00 Single Wheel Hoe-Has 6 weeding and cultivating teeth. Our net price 7 75 No. 19. Single Wheel Hoe Cultivator and Plow—Our net price.....

LAWN EDGE TRIMMER

Practically everyone who has use for a lawn mower has use for an Edger.

To keep grounds looking neat and attractive, the grass bordering all walks must be frequently edged and the No. 2 machine will do this work quickly and with little effort, no matter if the walks are straight or curved, or if they are of cement, stone or brick. Price, each, \$1.60. Postage extra.



Combined Hill and Drill Seeder-With 2 hoes, As a seeder without tools. Our net price. \$18.00 As a seeder without tools.



HORTICULTURAL TOOLS AND SUNDRIES

Baskets, Wire Hanging-12-in., 35c; 16-in.........50c

NORCROSS CULTIVATORS

The prongs are square spring steel bent cornerwise with forged shovels at the ends. The socket frame and clamping bar are made of toughest malleable. Handle, best grade of white ash.



3-prong, 9-in. hardwood handle. Each. 50c 3-prong, 48-in. maple handle. Each. 75c Dibbles-Iron with wood handle. For transplanting plants

Flower Garden Sets—English pattern, 1 to 5-tooth rake, 1 trowel, 1 hoe. All 16-inch handles. Per set...........\$1.00 Forks, Hand Weeding-Small size........................50c

A NEW AND BETTER GARDEN GLOVE



UTILITY Gloves

Made from special imported hides processed to render them amazingly soft and pliable. Permit almost barehand freedom yet provide complete all-leather protection. Ideal for garden and similar uses.

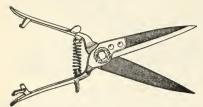
Dirt-proof-Durable-Washable

Four sizes: "SMALL" and

"MEDIUM" for Women, and "MEDIUM" and "LARGE" for Men. Price, 65c a pair. This is the first time we have ever offered an all-leather garden glove with these special qualities at such a low price.

HORTICULTURAL TOOLS AND SUNDRIES-Cont'd





Grasnips-No. 3. High carbon steel blades. Each....60c



Doo-Klip Long Handle Grass Shear—User stands erect at all times. Only one handle—no extra levers to operate.

TREE PRUNERS



Doo-Klip Pruner—Handles are so shaped that when held with the hand and wrist in the natural position, it gives a long, diagonal cut—the only healthy cut for any stalk. Each...\$1.25



e4 #E e2 00 CE 00

Pruning Shears	
Spades	1.25
Sprinkler, Rubber—Indispensable for floral work gardening. Each	and window
Cane Stakes, Japanese Bamboo, dyed green.	
3 ft	\$0.75 per 100
4 ft	.90 per 100
Cane Stakes, Japanese Bamboo, natural color-	-Strong, light,
durable for supporting plants. 6 ft	\$1.75 per 100
8 ft	2.00 per 100
Dahlia Stakes—Wooden, painted green, tapering 6 ft	at end.





GROWELL TABE PLANT & FLOWER POT

A NEW POT

Especially designed for use where transplanting is necessary and where it is desirable to avoid the usual set-back due to transplanting. Both pot and plant transplanted to field or beds without disturbing roots. Saves from 10 days to 2 weeks growing time. Increases profits. Used with great success by many growers.

		PRIC	ES			
Top	Bottom		12	50	100	1000
Dia.	Dia.	Height	Pots	Pots	Pots	Pots
23/4	11/2	3	\$0.50	\$1.75	\$3.00	\$20.00
$3\frac{1}{2}$	2	33/4	.60	2.00	3.50	23.00
4 1/8	23/8	4	.75	2.50	4.25	25.00
51/4	3	5	1.00	3.25	6.00	40.00
63/8	3 3/4	$6\frac{1}{4}$	1.25	4 25	7.75	50.00
	Dia. 2 3/4 3 1/2 4 1/8 5 1/4	Dia. Dia. 2 3/4 1 1/2 3 1/2 2 4 1/8 2 3/8 5 1/4 3	Top Bottom Dia. Height 234 11/2 3 31/2 2 33/4 41/8 23/8 4 51/4 3 5	Dia. Dia. Height Pots 2 3/4 1 ½ 3 \$0.50 3 ½ 2 3 ¾ .60 4 ½ 2 ¾ 4 .75 5 ½ 3 5 1.00	Top. Bottom Dia. Height 234 11½ 3 \$0.50 \$1.75 31½ 2 334 .60 2.00 4½ 23½ 4 .75 2.50 5½ 3 5 1.00 3.25	Top Dia. Bottom Dia. Height Height Height Pots Pots Pots Pots Pots Pots Pots Pot



Buckeye Lawn Sweeper—Sweeps your lawn of cut grass, leaves, twigs, stones and other loose, foreign articles. Sturdily constructed. The raking surface is 19 inches. Entire weight of a Buckeye Lawn Sweeper is less than half the weight of a lawn mower.



Pennsylvania Lawn Cleaner— Flexible rake bars, with steel springs and teeth, that rotate just like a lawn mower cylinder. Cleans your lawn more thoroughly and quicker than four men with hand rakes. The raking surface is 24 inches. Well constructed....\$32.50

RITTENHOUSE MOLE TRAP

The simplest, safest and surest mole trap ever invented. No danger of its going off unless the trigger is touched. Made of all steel and tinned. The spears are spring steel, therefore do not have to be as long as soft steel.

Price.........\$0.95

Moss, Green Sheet—For hanging baskets, etc. Per bale, 35c; large bundle (5 bales)............\$1.50

HORTICULTURAL TOOLS AND SUNDRIES-Cont'd

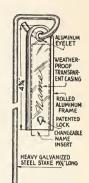


NEW IDEA PLANT LABELS

"KNOW YOUR FLOWERS"

These labels are weatherproof, renewable, interchangeable and always visible. Written with a common lead pencil. Supplied with a heavy galvanized, stiff, steel rod measuring 19½ inches in height, which permits pushing deeply into the ground and prevents bending. Each, 20c. Per doz...\$1.75

New Idea Renewals. Per doz. 20c



Hotkaps

INDIVIDUAL HOT HOUSES FOR EVERY PLANT Get Bigger Crops—To Market 3 Weeks Earlier!

Germaco Hotkaps can make you extra dollars this season. They protect plants from frost, wind, rain, insects and ground crusting. Thus they produce hardier. quicker crops. You get higher prices! Thousands were used in 48 states last year. They cost so little that growers cannot afford to be without them.

PRICES: 1,000 lots, \$11.00 per 1,000; 5,000 lots, \$10.75 per 1,000; 10,000 lots, \$10.50 per 1,000. 250 trial package, including garden setter with tamper, \$4.00; Germāco steel HOTKAP setter, with tamper. \$2.50.

If you need HOTKAPS for your backyard garden, note these prices: 50 with garden setter, \$1.50; 100 with garden setter and tamper, \$2.50.

Write for free pamphlet or order to-day!

Plant No. Plant No.

Rock

"TIMESAVER PLANT SUPPORT"

A long-lived, low-priced, completely adjustable support, all metal parts being galvanized, java end is green. Can be adjusted as to height and size of loop almost instantly and is practically hidden by the foliage of the plant it supports.

hidden	by the	foliage	of t	he pla	nt it's	upports.
						Per Doz.
No. 3-	-3 ½-foo	t				\$1.35
						1.95
						2.50
	0 10000					
Dimens	ions, 5 f	et squa	re. l	Frame o	f galva	
		LA	BEI	LS	Per 100	Per 1,000
Tree	Labe	ls 3½-in	ch c	opper		
D	66	91/:-		ed :	\$0.30 .20	\$2.75 1.75
Pot	44				.25	2.50
4.6	6.6	$\frac{4}{5}$.30	2.75
6.6	6.6	6			.35	3.00
Garder	. "	8			.75	6.75
Guide	• "	10			.90	8.00
					Per Doz.	Per 100
-Weat					\$0.50	\$3.00
s—Weat ½ inches.					.45	2.50
n Lab o. 51—4					.50	3.00

DUNHAM WATER-WEIGHT LAWN ROLLERS



Dunham Water-Weight Rollers are electric welded —no rivets used — the drum cannot possibly leak

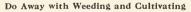
If you wish a fine lawn, you must use a Lawn Roller. In no other manner can a smooth, compact surface be maintained. It packs the soil, thus retaining the moisture throughout the season, enabling young and tender grass to secure the necessary nourishment.

The Dunham Water-Weight Roller can be made as heavy or as light as desired by simply putting in the right amount of water. For storing away or for moving, it can be emptied entirely and is light and easy to handle.

				Weight, Filled	d
No.	Dia.	Length	Weight, Empty	with Water	Price
2	14 in.	24 in.	60 lbs.	175 lbs.	\$ 9.00
4	18 in.	24 in	82 lbs.	265 lbs.	11.00
7	24 in.	24 in.	110 lbs.	420 lbs.	16.50

The above rollers weigh 50% more when filled with sand—water is more convenient.

GROW BIGGER, BETTER, EARLIER CROPS WITH MULCH PAPER—



Mulch Paper prevents the growth of weeds, preserves soil moisture and increases soil fertility. All vegetation protected and stimulated by Mulch Paper, matures weeks earlier and yields larger.



Type A-Light Weight-For annual crops.

Width	Length	Sq. Ft.	Weight	Per Roll
18 in.	900 ft.	1350	27 lbs.	\$3.00
36 in.	900 ft.	2700	53 lbs.	6.00

Type B-Heavy Weight-For all purposes.

Width	Length	Sq. Ft.	Weight	Per Roll
18 in.	450 ft.	675	30 lbs.	\$3.00
36 in.	450 ft.	1350	60 lbs.	6.00

Substantial discounts on orders of 30 rolls or more.

Raffia Natural—The best tying material for plants, also used for making baskets, etc. Per lb., 60c. 5 lbs......\$2.50

HORTICULTURAL TOOLS AND SUNDRIES-Cont'd

1 3

PAPER PLANT POTS

Packed 250 to a box

Saves time and labor to anyone growing their own plants from seed. Eliminates trouble and loss in using clay



Ready to Use

Size Depth Per 100 Per 1,000 Pots with folding bottom... 2x2 Pots with folding bottom... 3x3 50c 70c \$4.50 .5 6 00

NEPONSET WATER-PROOF PAPER FLOWER POTS



Lower in cost than earthen pots and unbreak-Lower in cost than earthen pots and unbreak-able. Domestic and commercial gardeners need the efficiency and convenience of the light weight, economical Neponset Pot. Excellent for growing, storage, shipping and miscellaneous purposes. Made of tough, waterproof paper that gives to them a lasting strength. They permit speed in handling, and if desired, it is easy to remove plants

Size	Dozen	Per 100	Per 1,000
21/4-inch	\$0.10	\$0.65	\$ 4.50
3 "	. 10	. 70	5.00
	. 15	. 85	7.00
312 "	. 20	1.15	9.00
4 "	. 25	1.40	11.00

RAKES

\$2.75

Scythe Snath-Each.

CAHOON BROADCAST SEED SOWER

Cyclone Broadcast Seed Sower

A general seeder, which has four pressed tin flanges and distributing wheel under and distributing wheel under the bottom; gearing wheel centered, making it easy to run. Has an accurate gauge. Sloping feed board and force-feed steel frame. and force-teen steel trains. This is one of the most widely used types. The sack holds one-half bushel; convenient hand hold and body shield. The machine is well braced. Price...\$2.00



Tin Horn Seed Sower—A light, accurate seeder which will broadcast clean seed from 30 to 40 ft. Length of the tube when extended is 30 inches. Good grade of heavy ducking is used on the sack. Weight, only 12 ounces. Price.......\$0.95

WHEELBARROW SEED SOWER



Wheelbarrow Seed Sower-Fastest of all seeders. Wheelbarrow Seed Sower—Fastest of all seeders. The most accurate and economical machine for sowing broadcast, all clovers, alfalfa, timothy and all grass seeds. The quantity of seed sown is positively controlled and does not depend on the operator—the only hand seeder with this advantage. This seeder does not injure or bunch the seed, but evenly distributes it the full length of the 14-ft. hopper. A true labor and time saving device where large areas are to be sown. Each....\$18.00

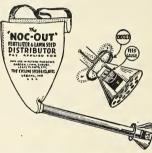
THE SACCO SEED AND FERTILIZER SPREADER

Here is a new and remarkably improved spreader with positive feed control attach-ment for distributing grass seed, plant foods and other granular materials. The Sacco Spreader offers you the advantages of perfect distribution, correct quantity of application and instanlarge estates



taneous feed control. Made in two sizes, for lawns, golf courses and

8-inch	Spreader \$ 8.00
	-
o-inch	Spreader 15.00



Noc-Out Fertilizer and Lawn Seed Distributor— For easy, uniform distribution of commercial fertilizer or lawn grass seed. An inexpensive time and labor saving device. Each......\$1 ...\$1.25

Hedge Shears-6-inch blade, \$1.75; 8-inch blade... 2.15



Trowel-Heavy, 6-inch crucible steel, forged one-piece.

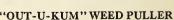


Transplanting Trowels-Can be used either as a trans planter, dibble or weed digger; blade being narrow and deeply curved.....



Dandelion Weeder and Asparagus Knife-Made of\$0.35 one-piece tempered steel....

Dandelion Weeder and Asparagus Knife—With 43-inch clear Ash handle. Length, over all, 49 ¾ inches.



A slight push and pull removes not only the weed, but the entire root. A perfect weed puller. Each.....\$0.75



Steel Garden Weeder-One-piece pressed steel. Has five steel fingers. Each......\$0.25



FLOWER POTS AND SAUCERS

of Extra Fine Finish and Bear Shipping Well.

No Charge for Packing. Earthenware Flower Pots cannot be sent by Parcel Post.

	STANDA	ARD FLO	OWER P	OTS ANI	D FERN	POTS		FLO	WER POT	SAUC	ERS
Size	Each	Dozen	Per 100	Size	Each	Dozen	Per 100	Size	Each	Dozen	Per 100
2	inch \$0.03						\$ 6.00	4 inch.	\$0 . 04	\$0.35	\$2.50
21/2	"03	. 35	2.50	6 "	12	1.20	9.00	6 "	05	.50	3.50 4.50
3				7 "			14.00	7 " .	10	1.00	7.00
31/2	"05	.45	3.25	8 "	25	2.75	20.00	8	12	1.20 2.00	
4								12 "	25	2.75	

PLANT TUBS



An excellent new tub, cheap, neat and durable. Made from 34-inch Cypress.

No.	4.	9	inches	diameter.	9	inches	depth							\$	0.8	35
No.	5.	10	4.4	**	9	64	7.4			 					1.1	10
No.	7.	12	4.4	44	11	4.4	**								1.6	55
No.	9.	14	44	44	13	4.6	6.6							. :	2.2	20
No. 1	11.	16	4.4	44	15	4.6	4.6								2.2	75
No. 1	3.	18	4.4	6.6	17	4.6	6.6	ì							3.5	50
No. 1	14.	19	**	**	18	44	6.6								4.0	00

Handle 35c per pair extra. All Prices Subject to Market Changes.



FLOWER BOXES

These boxes embody correct approved, scientific principles for raising luxuriant plants and flowers. A device inside the box permits the application of water to the plants without the slightest degree of untidyness which frequently arises from watering plants by sprinkling.

All boxes 7 inches wide and 6 inches deep.

20-inch.	Each\$1.00	32-inch.	Each \$	2.00
26-inch.	Each 1.50	38-inch.	Each	2.50
44-inch.	Each			3.00

STOCK AND POULTRY SUPPLIES

DR. HESS POULTRY AND STOCK REMEDIES



Poultry Pan-a-min— (formerly called Pan-a-cea). Helps moulters moult. Increases egg production—reduced chick mortality.
3 lbs., 50c; 7 lbs., \$1.00;
15 lbs......\$2.00

Poultry Ver-mi-trol-A flock treatment for poultry infested with large, round worms. 4-lb. box. \$1.25; 10-lb. box...\$2.75

Poultry Tablets—(formerly called Roup Tablets).
To be used as local antiseptic in drinking water. 100 tablet size......50c

Instant Louse Killer— 1-lb. box, 25c; 2½-lb. box......50c

Chick Tablets—(form-erly called White Diarrhea Tablets)—A bowel astringent given in the drinking water—50c 100 tablet size . . .

Dip and Disinfectant-Household size, 50c; qt. 60c; ½-gal., \$1.00; 1 gal.....\$1.75

SMC POULTRY FOOD

A perfectly balanced ration of grain without grit, shell or other adulterants. Current prices.

AME CHICK FEED

A perfectly balanced ration of grain and seeds for young chicks Current prices.

CELLIHOID LEC RANDS

	CELLO	LOID LEC	JUMIUS	
All colors	and sizes.	Doz., 10c.	10060c	

CHAMPION LEG BANDS

OIIIIII IO	T DDG DILLIDG
In sets, numbers 1 to 12	Set15c
	Set20c
	Set35c
In sets, numbers 1 to 100.	Set60c

Grit and Shell Box-Has three compartments. Each.. 85c

BUTTERMILK EGG MASH

Protein, 20%; Fat, 4%.

Meat Scraps. Protein 50%. 3 lbs., 25c; 25 lbs., \$1.40; larger quantities, current prices.

Nest Eggs-Porcelain. 5c each; 40c per dozen.

Egg Carriers—1 dozen e, per dozen, 25c; per 100, \$2.00.

Aluminized Metal Egg Crates—For sending eggs via parcel post. Made of a light but sturdy metal, with strength built into every joint, they are nevertheless sufficiently light to carry with a minimum of carrying costs. carrying costs.

1		dozen	size						\$1.00	
1	1/2								1.25	
2		4.4							1.50	
4		4.4	4.4						2.00	
6		44	44						2.50	





STOCK AND POULTRY SUPPLIES-Cont'd

O. K. POULTRY LITTER

A great Labor Saver and does away with most of the unpleas-A great Labor Saver and does away with most of the unpleasant work of caring for poultry. Repels vermin and is so light and springy that heavy birds do not injure themselves when alighting on it, thereby preventing bumble foot and lameness. Keeps the birds clean as it prevents the droppings from sticking to them. It is very economical as it outlasts any other litter two or three times. Prevents dampness and keeps the coops pure and sweet—there will be no unpleasant odors where it is used. Saves the cost of disinfection to the bulk will be no expected to the coops of the disinfectants.

One bale will cover about 80 square feet, 3 inches deep. Per bale, \$3.50;

5 bales, \$3.25 per bale; 10 bales, \$3.00 per bale. Write for prices on larger quantities.



MASON JAR FOUNTAIN

This appliance for chicks,



Lawn Park Brood Coops-Made from galvanized materials. will not rust, and is proof against all chick enemies.

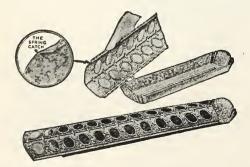
Size, closed, 18 x 24 inches; extended, 18 x 48 inches. Height, 19½ inches....\$3.75

DRY MASH HOPPERS

The improved curved bottom keeps the feed within easy reach The improved curved bottom keeps the feed within easy reach of the birds and the taper shape of the hopper—larger at the bottom—prevents the feed from clogging and insures a gradual, automatic feed. The wire grid and the wires running from the flange through the wire grid prevent the fowls from throwing out or wasting the feed.

The sloping top prevents them from roosting on the hopper. When both covers are closed it is rat, mouse and weather proof.

No. 35—8½ inches wide.	Capacity, 10 quarts\$1.50
No. 36-12 inches wide.	Capacity, 14 quarts 1.75
No 37-24 inches wide	Conscity 32 quarte 2 75



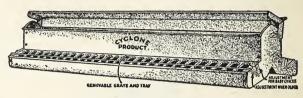
BABY CHICK FEEDING TROUGH

Made of heavy galvanized rust-proof sheet iron and used for baby chicks. Detachable top makes them easy to fill and keep clean. 11-inch length, 15c each; 21-inch length. Each. 25c

QUALITY BABY CHICKS



Beginning about March 1, we will have on sale, day old baby chicks of all breeds. They are pure bred from flocks that have been culled closely and every possible precaution taken to insure healthy chicks. We pay parteel post charges on 50 or more and guarantee 100% live arrivals. When better chicks are hatched, we will sell them Beginning about March 1



LARGE CAPACITY FEEDER

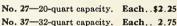
A wonderful feeder for young growing stock, and a great time and labor saver when chicks are raised in large number. Made of heavy galvanized iron with a large capacity.

The cover is hinged and provided with no roost contrivance. Easy to fill and clean. No waste or contamination of feed.

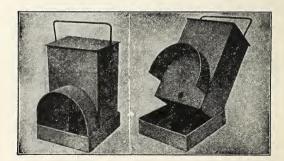
No. 220—20-inch length.	Each\$1.00
No. 240-40-inch length.	Each

CAN'T CLOG DRY MASH FEEDER

The feed magazine is suspended from the frame by short chains, which can be adjusted for length. The feed pan hangs from the bottom of the magazine by three short chains leaving a space between magazine and pan thru which the mash flows. Vibration from the jostling of the hens as they eat causes the mash to feed down steadily. The vertical sides of the magazine and the cone-shaped bottom of the pan make clogging impossible. the pan make clogging impossible.







SQUARE BOTTOM DRINKING FOUNTAIN

Made of heavy galvanized iron. Easy to clean. Prevents disease. Prices, 2 qts., 95c; 1-gal., \$1.20; 2 gals......\$1.50

LITTLE PUTNAM STOVE

A Little Putnam Stove is nine inches in diameter and four inches high.

BUCKEYE INCUBATORS AND BROODERS

Buckeye Incubators are made and guaranteed by the biggest company of its kind in the world. A company unequaled in practical experience, engineering ability and financial resources.

THE WORLD'S BEST INCUBATORS

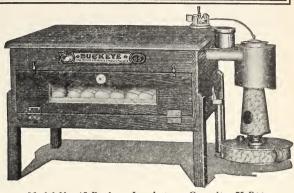
The new line of Buckeye Incubators affords a range of capacity from 75 to 576 eggs. This meets the demand expressed today by users of domestic incubators.

Cabinets of beautiful finish. Heavy insulation. Patented all-metal thermostat assures correct incubating temperature. Heating tank built of heavy copper. Circulates hot water perfectly. Efficient lamp with large oil capacity. Also available with gas burner. Clean flame without odors. Underwriters' Label on all models except No. 65—A warranty against fire hazard. Automatic egg turners on four larger models prevent chilling or breaking eggs. Egg tester and thermometer free with each incubator. Buckeyes produce largest hatches of big fluffy lively chicks. lively chicks.

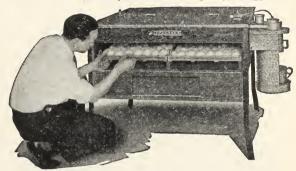
No.	65.	7 5	Eggs	3.					 							 . 1	18.50	
No.	66.	143	Eggs	8.					 								39.50	
No.	67.	286	Eggs	8.			 		 								57.75	
No.	68.	416	Eggs	8.			 		 								76.50	
No.	69.	576	Eggs	3.					 								97.50	

OUALITY BABY CHICKS

Beginning about March 1st, we will have on sale, day old baby chicks of all breeds. They are pure bred from flocks that have been culled closely and every possible precaution taken to insure healthy chicks. We pay parcel post charges on 50 or more and guarantee 100% live arrival. When better chicks are hatched, we will sell them.



Model No. 65 Buckeye Incubator. Capacity, 75 Eggs



Model No. 67 Buckeye Incubator. Capacity, 286 Eggs

BUCKEYE COAL-BURNING COLONY BROODER

COLONY BROODER

The Buckeye Coal Burner is the pioneer colony brooder. It has been the leader for sixteen years. It has saved millions of chicks each year for poultry raisers. It has the capacity to supply abundant heat in the worst weather. The stove is larger. It holds more coal. It burns longer with one fueling. It burns hard or soft coal. It has the famous non-clogging Rocker Grate. This grate is bigger—makes possible a larger fire body. It doesn't let the fire get choked or smothered. And the burning is regulated by a reliable thermostat which operates the Double Check Draft. This insures steady brooding temperatures. The fire won't overheat or go out. And the wonderful Buckeye Canopy revolves, making the floor under the Brooder easy to get at. The Canopy radiates heat uniformly over the brooding area. Chicks are always comfortable. They keep strong and healthy. No other coal-burning brooder is such a splendid value, No. 117 No. 118 No. 119 52" 56" No. 120

40 lbs.

75 lbs.

60 lbs.



	NO. 117	140. 118	NO. 119	NO. 120
Chick Capacity	300	500	1000	1200
Ieight of Stove	20"	21 1/2"	24 1/4"	28"
Diameter of Base	11"	12 13"	$\frac{24 \frac{1}{4}''}{13 \frac{1}{2}''}$	131/2"
Diameter of Grate	81/4"	9 3 "	10 16	10 9 "
	- / -	10	10	

HERE'S THE NEW OIL-BURNING BROODER SENSATION

BUCKEYE "EVEN-HEAT"

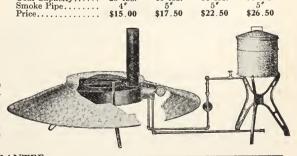
The Oil-Burning Brooder with the Revolutionary Hot-Circle Heater

This is a new brooder. It's just what poultry raisers have been wanting—a big, powerful, reliable oil-burning prooder at a lower price.

CAN BE USED THREE WAYS

Because the "Even-Heat" stands above the floor, it can be used as a "spot heater". That is, the controls can be set t o m_n ke the fire burn low so that only the space immediately under the

(Continued on Page 94)



25 lbs.

-GUARANTEE-

Every Buckeye Incubator is guaranteed to give satisfactory service. It is guaranteed, when operated in accordance with our instructions, to hatch a high percentage of hatchable eggs, and to produce as strong and vigorous chicks as can possibly be produced from the eggs set in the incubator. It is further guaranteed that all mechanical parts are of perfect construction, and any Buckeye Incubator opart thereof that does not fulfill our guarantee in every particular will be replaced at any time within forty days from date of purchase. Signed: THE BUCKEYE INCUBATOR COMPANY

"BUCKEYE EVEN-HEAT" INCUBATOR-Cont'd

stove and canopy is held at brooding temperatures. A limited number of chicks may be brooded in this way with the very minimum consumption of fuel.

But the normal method of operating the "Even-Heat" is to set the controls so that the correct brooding temperatures are maintained at the edge of the canopy and beyond. This gives the chicks a big circle where they can spread out and rest in perfect comfort. And the stove has the heating power to maintain uniform temperatures over the big circle in the coldest weather. Thus, chicks up to the full rated capacity are kept cozy and comfortable day and night, week in and week out.

And the "Even-Heat" can also be used as a room heater. This is done by raising the cover over the stove so that air will circulate through the brooder. A whole chicken house or a fairly large room can be kept warm in this way, making the "Even-Heat" fine for providing the temperatures needed in laying houses, broiler rooms, hog farrowing houses, etc.

MADE IN TWO SIZES

	No. 154	No. 162
Chick Capacity	500	1200
Diameter of Canopy	54"	62"
Price	\$21.50	\$23.50

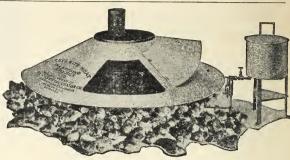
BUCKEYE "RITE-HEAT" OIL-BURNING **BROODERS**

Newly designed and perfected, large capacity, oil-burning brooders. The improved stove has two baffle plates, greatly increasing heating efficiency. The newly designed burner has an exclusive new flame spreader that throws the flame down and out to the sides of the stove. And the perfected "Rite-Heat" has a special double pre-heating chamber, thoroughly heating the air before it reaches the burner—an improvement that enables the flame to burn continuously even at a very low rate. The flame won't flare up. It won't go out. The new smoke pipe cap and back draught check damper prevent back draughts from reaching the flame.

The new "Rite-Heat" burner bowl has an overflow pipe for any excess oil that may be supplied to the burner.

The improved thermostatically controlled Heat Regulator insures ideal temperature under the hover. It has a new sight feed showing at a glance how much oil is being delivered to the burner. The Revolving Hover is a remarkable labor-saver and a marvelous deflector.

"Rite-Heat" saves chicks where other oil-burning brooders fail. Safe; dependable; durable; economical.



	No. 103	No. 104
Chick Capacity	500	1200
Diameter of Canopy	52"	62"
Price	\$29.50	\$31.50
4-Gallon Metal Oil Container.		,



BUCKEYE "ELECTRIC" COLONY BROODER

The Buckeye Electric Brooder gives a maximum of brood-The Buckeye Electric Brooder gives a maximum of brooding efficiency without the disadvantages common to other brooders of this type. Generates a remarkable amount of heat with comparatively small current consumption. The heating coils are a special grade resistance wire. Designed for 100 to 125 volts, A. C. It has the exclusive Buckeye Double "Diafram" Heat Diffuser; assures a more uniform distribution of heat under the hover. The control switch is thermostatically operated. Contact points won't stick. They won't burn out. Buckeye assures perfect ventilation that prevents concentration of moisture under hover. That's important. Ideal for poultry raisers who want to brood comparatively small flocks of chicks in warm brooder houses.

	No. 90	No. 91	No. 92
Chick Capacity	50	100	200
Diameter of Canopy	26"	36"	46"
Price	\$14.50	\$19.75	\$24.75

BUCKEYE BLUE FLAME COLONY BROODER

An ideal oil-burning brooder for heated or warmly constructed brooding houses. Has a powerful burner; a self-feeding oil container, holding one gallon of oil. Galvanized steel hopper supported by cast-iron legs, and equipped with "Diafram" Heat Conveyor which distributes heat uniformly and provides perfect ventilation. No complicated levers, valves or thermostats. No "oil-leveling" mechanism to contend with Simple new and recognized to construct. tend with. Simple, easy and economical to operate.

No. 27-B.	250 Chicks, diameter, 34".	Price\$14.50
No. 80-B.	350 Chicks, diameter, 42".	Price 15.50
	500 Chicks, diameter, 52".	





BUCKEYE GAS-BURNING COLONY BROODER

This is the ideal brooder to use where natural gas is cheap. has a great new burner that effects a complete mixture of air and gas. This means a hot, clean flame without soot or odors. A special deflector, backed with a mat of 1-inch-thick air-cell asbestos,

extracts all heat from the flame and deflects it uniformly over the extracts all heat from the flame and deflects it uniformly over the brooding area. Steady temperatures are maintained by accurate, positive thermostatic control. A by-pass in the control valve supplies enough gas to keep the flame burning at the minimum rate. It won't go out or flare back. The canopy is made of heavy galvanized metal. It's shaped to radiate heat uniformly over the brooding area. The brooder stands on a solid pedestal which prevents any possibility of tipping. No gas-burning brooder ever built can compare with the Buckeye in safety, economy and chick-saving ability. saving ability.

	No. 147	No. 150
Chick Capacity	300	600
Diameter of Canopy	47"	56"
Price		\$12.00

Buckeye Brooders are guaranteed to be exactly as represented and to be absolutely satisfactory when operated in accordance with our instructions. But we do more than simply say we guarantee these brooders. We offer to permit you to try any size Buckeye Brooder for 30 days, and if you are not entirely satisfied, return the brooder and your money will be refunded without argument.

Signed: THE BUCKEYE INCUBATOR COMPANY



SENT POSTPAID AT PRICES GIVEN







Garden Pools (Large and Small), by Ramsey and Lawrence—Nothing else can add so much to your garden as a pool, even if it is only a transformed wash tub in the tiniest garden space. How to have one is fully explained in this new book. Its text is so complete and its illustrations are so numerous and practical that you can easily find the type of pool that fits in your garden and learn all about designing, planting and caring for it. 41 illustrations, 122 pages. \$2 50

How to Grow Roses, by Pyle, McFarland and Stevens—Here you will find full and practical information on every question on the growing of garden roses. Written from the life-time experience of three of our greatest growers. 45 varieties are illustrated in full color. The best book on roses ever published. 138 illustrations, 211 pages. \$2.00









Rock Gardens, by F. F. Rockwell—Shows just how you can build a rock garden yourself, on a small or large scale and at little expense. Describes the types of rock gardens, tells what soils, climates and locations are best, how to construct and what to plant for the effect you want. 31 illustrations, 86 pages............\$1.00

Perennial Gardens, by H. S. Ortloff—Following the simple directions in this book insures a perennial garden crowded with bloom, in which the colors make a perfectly blended picture. First come plans, showing how to locate and lay out the garden; then clear directions for preparing the soil, fertilizing, planting, cultivating, transplanting and propagation. 18 illustrations, 90 pages. \$1.25





The Gardener, by L. H. Bailey—You get full advantage of Dr. Bailey's unequalled knowledge and experience in this book. It tells how to grow flowers, vegetables and fruits from the time of planting through to maturity. Special articles on different types of gardening. Information that is easy to find and simple to use. 116 illustrations, 260 pages. \$2.00

Around the Year in the Garden, by F. F. Rockwell—Because of the time when you do your garden work is so important you need a regular schedule. This book gives you complete information on every garden problem outlined week by week, and written by a practical gardener. 88 illustrations, 350 pages \$2.50



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